

酵素と補酵素 D08+

Cytochromes D08-10+ #

Cytochrome a Group D08-10-10+ #

Cytochromes a D08-10-10-10 #

Cytochromes a1 D08-10-10-20 #

Cytochromes a3 D08-10-10-30 #

Cytochrome b Group D08-10-20+ #

Cytochromes b D08-10-20-10 #

Cytochromes b5 D08-10-20-20 #

Cytochromes b6 D08-10-20-30 #

Cytochrome c Group D08-10-30+ #

Cytochromes c D08-10-30-10 #

Cytochromes c' D08-10-30-20 #

Cytochromes c1 D08-10-30-30 #

Cytochromes c2 D08-10-30-40 #

Cytochromes c6 D08-10-30-50 #

Cytochrome d Group D08-10-40 #

Cytochrome P-450 D08-10-50+ #

Aryl Hydrocarbon Hydroxylases D08-10-50-10+ #

Aniline Hydroxylase D08-10-50-10-10 #

Benzopyrene Hydroxylase D08-10-50-10-20 #

Cytochrome P-450 CYP1A1 D08-10-50-10-30 #

Cytochrome P-450 CYP1A2 D08-10-50-10-40 #

Cytochrome P-450 CYP1B1 D08-10-50-10-50 #

Cytochrome P-450 CYP2B1 D08-10-50-10-60 #

Cytochrome P-450 CYP2B6 D08-10-50-10-70 #

Cytochrome P-450 CYP2C8 D08-10-50-10-80 #

Cytochrome P-450 CYP2D6 D08-10-50-10-90 #

Camphor 5-Monooxygenase D08-10-50-20 #

trans-Cinnamate 4-Monooxygenase D08-10-50-30 #

\* Cytochrome P-450 CYP2J2 D08-10-50-40 #

Cytochrome P450 Family 1 D08-10-50-50+ #

Cytochrome P-450 CYP1A1 D08-10-50-50-10 #

Cytochrome P-450 CYP1A2 D08-10-50-50-20 #

Cytochrome P-450 CYP1B1 D08-10-50-50-30 #

Cytochrome P450 Family 2 D08-10-50-60+ #

Cytochrome P-450 CYP2A6 D08-10-50-60-10 #

Cytochrome P-450 CYP2B1 D08-10-50-60-20 #

Cytochrome P-450 CYP2B6 D08-10-50-60-30 #

Cytochrome P-450 CYP2C8 D08-10-50-60-40 #

Cytochrome P-450 CYP2D6 D08-10-50-60-50 #

Cytochrome P-450 CYP2E1 D08-10-50-60-60 #

Limonene Hydroxylases D08-10-50-60-70+ #

Cytochrome P-450 CYP2C9 D08-10-50-60-70-10 #

Cytochrome P-450 CYP2C19 D08-10-50-60-70-20 #

Cytochrome P450 Family 3 D08-10-50-70+ #

Cytochrome P-450 CYP3A D08-10-50-70-10+ #

Cytochrome P-450 CYP3A4 D08-10-50-70-10-10 #

Cytochrome P450 Family 4 D08-10-50-80+ #

Cytochrome P-450 CYP4A D08-10-50-80-10 #

Cytochrome P450 Family 6 D08-10-50-90 #

Cytochrome P450 Family 7 D08-10-50-100+ #

Cholesterol 7 Alpha-Monooxygenase D08-10-50-100-10 #

Cytochrome P450 Family 8 D08-10-50-110+ #

Steroid 12-Alpha-Hydroxylase D08-10-50-110-10 #

Cytochrome P450 Family 11 D08-10-50-120+ #

Cholesterol Monooxygenase (Side-Chain-Cleaving) D08-10-50-120-10 #

Cytochrome P-450 CYP11B2 D08-10-50-120-20 #

Steroid 11-Beta-Monooxygenase D08-10-50-120-30 #

- Cytochrome P450 Family 12 D08-10-50-130 #  
 Cytochrome P450 Family 17 D08-10-50-140+ #  
     Steroid 17-Alpha-Monooxygenase D08-10-50-140-10 #  
 Cytochrome P450 Family 19 D08-10-50-150+ #  
     Aromatase D08-10-50-150-10 #  
 Cytochrome P450 Family 21 D08-10-50-160+ #  
     Steroid 21-Monooxygenase D08-10-50-160-10 #  
 Cytochrome P450 Family 24 D08-10-50-170+ #  
     Vitamin D3 24-Hydroxylase D08-10-50-170-10 #  
 Cytochrome P450 Family 26 D08-10-50-180+ #  
     Retinoic Acid 4-Hydroxylase D08-10-50-180-10 #  
 Cytochrome P450 Family 27 D08-10-50-190+ #  
     Cholestanetriol 26-Monooxygenase D08-10-50-190-10 #  
     25-Hydroxyvitamin D3 1-Alpha-Hydroxylase D08-10-50-190-20 #  
 Cytochrome P450 Family 46 D08-10-50-200+ #  
     Cholesterol 24-Hydroxylase D08-10-50-200-10 #  
 Cytochrome P450 Family 51 D08-10-50-210+ #  
     Sterol 14-Demethylase D08-10-50-210-10 #  
 Steroid Hydroxylases D08-10-50-220+ #  
     Aromatase D08-10-50-220-10 #  
     Cholestanetriol 26-Monooxygenase D08-10-50-220-20 #  
     Cholesterol 24-Hydroxylase D08-10-50-220-30 #  
     Cholesterol Monooxygenase (Side-Chain-Cleaving) D08-10-50-220-40 #  
     Cholesterol 7 Alpha-Monooxygenase D08-10-50-220-50 #  
     Cytochrome P-450 CYP11B2 D08-10-50-220-60 #  
     25-Hydroxyvitamin D3 1-Alpha-Hydroxylase D08-10-50-220-70 #  
     Steroid 12-Alpha-Hydroxylase D08-10-50-220-80 #  
     Steroid 16-Alpha-Hydroxylase D08-10-50-220-90 #  
     Steroid 11-Beta-Monooxygenase D08-10-50-220-100 #  
     Steroid 17-Alpha-Monooxygenase D08-10-50-220-110 #  
     Steroid 21-Monooxygenase D08-10-50-220-120 #  
     Sterol 14-Demethylase D08-10-50-220-130 #  
 Cytochromes f D08-10-60 #  
**酵素** D08-20+  
 Catalytic RNA D08-20-10+ #  
     Ribonuclease P D08-20-10-10 #  
     Self-Splicing Ribosomal RNA D08-20-10-20 #  
 Deubiquitinating Enzymes D08-20-20+  
     Ataxin-3 D08-20-20-10 #  
     Deubiquitinating Enzyme CYLD D08-20-20-20 #  
     Ubiquitin-Specific Protease D08-20-20-30+ #  
         COP9 Signalosome Complex D08-20-20-30-10 #  
         Ubiquitin-Specific Peptidase 7 D08-20-20-30-20 #  
         腫瘍壊死因子アルファ誘導タンパク質3 D08-20-20-30-30 #  
     Ubiquitin Thiolesterase D08-20-20-40 #  
 DNA制限修飾酵素 D08-20-30+  
     DNA Modification Methylases D08-20-30-10 #  
     制限酵素 D08-20-30-20+ #  
         Type I Site-Specific Deoxyribonucleases D08-20-30-20-10 #  
         Type II Site-Specific Deoxyribonucleases D08-20-30-20-20+ #  
             Deoxyribonuclease BamHI D08-20-30-20-20-10 #  
             Deoxyribonuclease EcoRI D08-20-30-20-20-20 #  
             Deoxyribonuclease HindIII D08-20-30-20-20-30 #  
             Deoxyribonuclease HpaII D08-20-30-20-20-40 #  
         Type III Site-Specific Deoxyribonucleases D08-20-30-20-30 #  
 DNA Repair Enzymes D08-20-40+  
     AlkB Enzymes D08-20-40-10+ #  
         AlkB Homolog 1, Histone H2a Dioxygenase D08-20-40-10-10 #  
         AlkB Homolog 2, Alpha-Ketoglutarate-Dependent Dioxygenase D08-20-40-10-20 #

AlkB Homolog 3, Alpha-Ketoglutarate-Dependent Dioxygenase D08-20-40-10-30 #  
 AlkB Homolog 5, RNA Demethylase D08-20-40-10-40 #  
 Alpha-Ketoglutarate-Dependent Dioxygenase FTO D08-20-40-10-50 #  
 Deoxyribodipyrimidine Photo-Lyase D08-20-40-20 #  
 DNA-(Apurinic or Apyrimidinic Site) Lyase D08-20-40-30 #  
 DNA N-Glycosidase D08-20-40-40+ #  
   DNA-Formamidopyrimidine Glycosylase D08-20-40-40-10 #  
   Thymine DNA Glycosylase D08-20-40-40-20 #  
   Uracil-DNA Glycosidase D08-20-40-40-30  
 DNA Ligases D08-20-40-50+ #  
   DNA Ligase (ATP) D08-20-40-50-10 #  
 MutL Proteins D08-20-40-60+ #  
   Mismatch Repair Endonuclease PMS2 D08-20-40-60-10 #  
   MutL Protein Homolog 1 D08-20-40-60-20 #  
 MutS Proteins D08-20-40-70+ #  
   MutS DNA Mismatch-Binding Protein D08-20-40-70-10 #  
   MutS Homolog 2 Protein D08-20-40-70-20 #  
 Polynucleotide 5'-Hydroxyl-Kinase D08-20-40-80 #  
 Holoenzymes D08-20-50+  
   Apoenzymes D08-20-50-10 #  
 Isoenzymes D08-20-60+ #  
   Agalsidase Alfa D08-20-60-10 #  
   Agalsidase Beta D08-20-60-20 #  
 Penicillin-Binding Proteins D08-20-70 #  
 Recombinases D08-20-80+  
   Holliday Junction Resolvases D08-20-80-10 #  
   Integrases D08-20-80-20+  
     Transposases D08-20-80-20-10+ #  
       HIV Integrase D08-20-80-20-10-10 #  
   Rec A Recombinases D08-20-80-30+ #  
     Rad51 Recombinase D08-20-80-30-10 #  
   Transposon Resolvases D08-20-80-40 #  
   VDJ Recombinases D08-20-80-50 #  
 異性化酵素 D08-20-90+  
   DNA Helicases D08-20-90-10+ #  
     DnaB Helicases D08-20-90-10-10 #  
     Ku Autoantigen D08-20-90-10-20 #  
   Minichromosome Maintenance Proteins D08-20-90-10-30+ #  
     Minichromosome Maintenance Complex Component 2 D08-20-90-10-30-10 #  
     Minichromosome Maintenance Complex Component 3 D08-20-90-10-30-20 #  
     Minichromosome Maintenance Complex Component 4 D08-20-90-10-30-30 #  
     Minichromosome Maintenance Complex Component 5 D08-20-90-10-30-40 #  
     Minichromosome Maintenance Complex Component 6 D08-20-90-10-30-50 #  
     Minichromosome Maintenance Complex Component 7 D08-20-90-10-30-60 #  
     Minichromosome Maintenance Complex Component 8 D08-20-90-10-30-70 #  
     Minichromosome Maintenance Complex Component 9 D08-20-90-10-30-80 #  
   RecQ Helicases D08-20-90-10-40+ #  
     Werner Syndrome Helicase D08-20-90-10-40-10 #  
   X-Linked Nuclear Protein D08-20-90-10-50  
   Xeroderma Pigmentosum Group D Protein D08-20-90-10-60 #  
 DNA Topoisomerases D08-20-90-20+  
   DNA Topoisomerase I D08-20-90-20-10 #  
   DNA Topoisomerase II D08-20-90-20-20+  
     DNA Gyrase D08-20-90-20-20-10 #  
     DNA Topoisomerase IV D08-20-90-20-20-20 #  
 Intramolecular Lyases D08-20-90-30+  
   Inositol-3-Phosphate Synthase D08-20-90-30-10  
 Intramolecular Oxidoreductases D08-20-90-40+  
   Aldose-Ketose Isomerases D08-20-90-40-10+

- Glucose-6-Phosphate Isomerase** D08-20-90-40-10-10  
**Mannose-6-Phosphate Isomerase** D08-20-90-40-10-20  
**Triose-Phosphate Isomerase** D08-20-90-40-10-30  
**Carbon-Carbon Double Bond Isomerases** D08-20-90-40-20+  
**Dodecenoyl-CoA Isomerase** D08-20-90-40-20-10+  
**Peroxisomal Bifunctional Enzyme** D08-20-90-40-20-10-10 #  
**Steroid Isomerases** D08-20-90-40-20-20  
**Prostaglandin-E Synthases** D08-20-90-40-30  
**Sulfur-Sulfur Bond Isomerases** D08-20-90-40-40+  
**Protein Disulfide-Isomerases** D08-20-90-40-40-10  
**Thromboxane-A Synthase** D08-20-90-40-50  
**Intramolecular Transferases** D08-20-90-50+  
**2-Acetolactate Mutase** D08-20-90-50-10  
**Chorismate Mutase** D08-20-90-50-20+  
**Prephenate Dehydratase** D08-20-90-50-20-10 #  
**Prephenate Dehydrogenase** D08-20-90-50-20-20 #  
**Methylmalonyl-CoA Mutase** D08-20-90-50-30  
**Phosphotransferases (Phosphomutases)** D08-20-90-50-40+  
**Bisphosphoglycerate Mutase** D08-20-90-50-40-10  
**Phosphoglucomutase** D08-20-90-50-40-20  
**Phosphoglycerate Mutase** D08-20-90-50-40-30  
**cis-trans-Isomerases** D08-20-90-60+  
**Peptidylprolyl Isomerase** D08-20-90-60-10+  
**Immunophilins** D08-20-90-60-10-10+ #  
**Cyclophilins** D08-20-90-60-10-10-10+ #  
**Cyclophilin A** D08-20-90-60-10-10-10-10  
**Cyclophilin C** D08-20-90-60-10-10-10-20  
**\* Cyclophilin D** D08-20-90-60-10-10-10-30  
**Tacrolimus Binding Proteins** D08-20-90-60-10-10-20+ #  
**Tacrolimus Binding Protein 1A** D08-20-90-60-10-10-20-10 #  
**NIMA-Interacting Peptidylprolyl Isomerase** D08-20-90-60-10-20  
**Peptidyl-Prolyl cis-trans Isomerase NIMA-Interacting 4** D08-20-90-60-10-30 #  
**Racemases and Epimerases** D08-20-90-70+  
**Amino Acid Isomerases** D08-20-90-70-10+  
**Alanine Racemase** D08-20-90-70-10-10  
**Carbohydrate Epimerases** D08-20-90-70-20+  
**UDP-Glucose 4-Epimerase** D08-20-90-70-20-10  
**加水分解酵素** D08-20-100+  
**Acid Anhydride Hydrolases** D08-20-100-10+  
**AAA Proteins** D08-20-100-10-10+ #  
**ATPases Associated with Diverse Cellular Activities** D08-20-100-10-10-10+ #  
**ATP-Dependent Proteases** D08-20-100-10-10-10-10+ #  
**ATP-Dependent Endopeptidases** D08-20-100-10-10-10-10-10+ #  
**Endopeptidase Clp** D08-20-100-10-10-10-10-10-10 #  
**Endopeptidase La** D08-20-100-10-10-10-10-10-20 #  
**Dyneins** D08-20-100-10-10-10-20 #  
**N-Ethylmaleimide-Sensitive Proteins** D08-20-100-10-10-10-30 #  
**Katanin** D08-20-100-10-10-10-40 #  
**Replication Protein C** D08-20-100-10-10-10-50 #  
**Spastin** D08-20-100-10-10-10-60 #  
**Valosin Containing Protein** D08-20-100-10-10-10-70 #  
**Apyrase** D08-20-100-10-20  
**ATPases** D08-20-100-10-30+  
**Arsenite Transporting ATPases** D08-20-100-10-30-10 #  
**ATPases Associated with Diverse Cellular Activities** D08-20-100-10-30-20+ #  
**ATP-Dependent Proteases** D08-20-100-10-30-20-10+ #  
**ATP-Dependent Endopeptidases** D08-20-100-10-30-20-10-10+ #  
**Endopeptidase Clp** D08-20-100-10-30-20-10-10-10 #  
**Endopeptidase La** D08-20-100-10-30-20-10-10-20 #

- Dyneins D08-20-100-10-30-20-20 #
- N-Ethylmaleimide-Sensitive Proteins D08-20-100-10-30-20-30 #
- Katanin D08-20-100-10-30-20-40 #
- Replication Protein C D08-20-100-10-30-20-50 #
- Spastin D08-20-100-10-30-20-60 #
- Valosin Containing Protein D08-20-100-10-30-20-70 #
- Ca(2+)-Mg(2+)-ATPase D08-20-100-10-30-30
- Chaperonins D08-20-100-10-30-40+ #
  - Group I Chaperonins D08-20-100-10-30-40-10+ #
    - Chaperonin 60 D08-20-100-10-30-40-10-10 #
  - Group II Chaperonins D08-20-100-10-30-40-20+ #
    - Chaperonin Containing TCP-1 D08-20-100-10-30-40-20-10 #
    - Thermosomes D08-20-100-10-30-40-20-20 #
- DNA Helicases D08-20-100-10-30-50+ #
  - DnaB Helicases D08-20-100-10-30-50-10 #
  - Ku Autoantigen D08-20-100-10-30-50-20 #
  - Minichromosome Maintenance Proteins D08-20-100-10-30-50-30+ #
    - Minichromosome Maintenance Complex Component 2 D08-20-100-10-30-50-30-10 #
    - Minichromosome Maintenance Complex Component 3 D08-20-100-10-30-50-30-20 #
    - Minichromosome Maintenance Complex Component 4 D08-20-100-10-30-50-30-30 #
    - Minichromosome Maintenance Complex Component 5 D08-20-100-10-30-50-30-40 #
    - Minichromosome Maintenance Complex Component 6 D08-20-100-10-30-50-30-50 #
    - Minichromosome Maintenance Complex Component 7 D08-20-100-10-30-50-30-60 #
    - Minichromosome Maintenance Complex Component 8 D08-20-100-10-30-50-30-70 #
    - Minichromosome Maintenance Complex Component 9 D08-20-100-10-30-50-30-80 #
  - RecQ Helicases D08-20-100-10-30-50-40+ #
    - Werner Syndrome Helicase D08-20-100-10-30-50-40-10 #
  - Xeroderma Pigmentosum Group D Protein D08-20-100-10-30-50-50 #
- Mi-2 Nucleosome Remodeling and Deacetylase Complex D08-20-100-10-30-60 #
- MutL Proteins D08-20-100-10-30-70+ #
  - Mismatch Repair Endonuclease PMS2 D08-20-100-10-30-70-10 #
  - MutL Protein Homolog 1 D08-20-100-10-30-70-20 #
- MutS Proteins D08-20-100-10-30-80+ #
  - MutS DNA Mismatch-Binding Protein D08-20-100-10-30-80-10 #
  - MutS Homolog 2 Protein D08-20-100-10-30-80-20 #
- P-Type ATPases D08-20-100-10-30-90+ #
  - Calcium-Transporting ATPases D08-20-100-10-30-90-10+ #
    - Plasma Membrane Calcium-Transporting ATPases D08-20-100-10-30-90-10-10 #
    - Sarcoplasmic Reticulum Calcium-Transporting ATPases D08-20-100-10-30-90-10-20 #
  - Copper-Transporting ATPases D08-20-100-10-30-90-20 #
  - H(+)-K(+)-Exchanging ATPase D08-20-100-10-30-90-30 #
  - Sodium-Potassium-Exchanging ATPase D08-20-100-10-30-90-40 #
- Proton-Translocating ATPases D08-20-100-10-30-100+ #
  - Bacterial Proton-Translocating ATPases D08-20-100-10-30-100-10 #
  - Chloroplast Proton-Translocating ATPases D08-20-100-10-30-100-20 #
  - Mitochondrial Proton-Translocating ATPases D08-20-100-10-30-100-30 #
  - Vacuolar Proton-Translocating ATPases D08-20-100-10-30-100-40 #
- \* SecA Proteins D08-20-100-10-30-110
- 分子モータータンパク質 D08-20-100-10-30-120+ #
  - Dyneins D08-20-100-10-30-120-10+ #
    - Axonemal Dyneins D08-20-100-10-30-120-10-10
    - Cytoplasmic Dyneins D08-20-100-10-30-120-10-20
  - Kinesins D08-20-100-10-30-120-20 #
  - Myosins D08-20-100-10-30-120-30+ #
    - \* Myosin VIIa D08-20-100-10-30-120-30-10 #
    - Myosin Heavy Chains D08-20-100-10-30-120-30-20 #
    - Myosin Type I D08-20-100-10-30-120-30-30 #
    - Myosin Type II D08-20-100-10-30-120-30-40+ #
      - Cardiac Myosins D08-20-100-10-30-120-30-40-10+ #

- Atrial Myosins D08-20-100-10-30-120-30-40-10-10 #
- Ventricular Myosins D08-20-100-10-30-120-30-40-10-20 #
- Nonmuscle Myosin Type IIA D08-20-100-10-30-120-30-40-20 #
- Nonmuscle Myosin Type IIB D08-20-100-10-30-120-30-40-30 #
- Skeletal Muscle Myosins D08-20-100-10-30-120-30-40-40 #
- Smooth Muscle Myosins D08-20-100-10-30-120-30-40-50 #
- Myosin Type III D08-20-100-10-30-120-30-50 #
- Myosin Type IV D08-20-100-10-30-120-30-60 #
- Myosin Type V D08-20-100-10-30-120-30-70 #
- GTP Phosphohydrolases D08-20-100-10-40+
- Dynamins D08-20-100-10-40-10+ #
- Dynamin I D08-20-100-10-40-10-10 #
- Dynamin II D08-20-100-10-40-10-20 #
- Dynamin III D08-20-100-10-40-10-30 #
- GTP-Binding Proteins D08-20-100-10-40-20+ #
- GTP Phosphohydrolase-Linked Elongation Factors D08-20-100-10-40-20-10+ #
- Peptide Elongation Factor 1 D08-20-100-10-40-20-10-10 #
- Peptide Elongation Factor 2 D08-20-100-10-40-20-10-20 #
- Peptide Elongation Factor G D08-20-100-10-40-20-10-30 #
- Peptide Elongation Factor Tu D08-20-100-10-40-20-10-40 #
- Heterotrimeric GTP-Binding Proteins D08-20-100-10-40-20-20+ #
- GTP-Binding Protein Alpha Subunits D08-20-100-10-40-20-20-10+ #
- GTP-Binding Protein Alpha Subunits, G12-G13 D08-20-100-10-40-20-20-10-10 #
- GTP-Binding Protein Alpha Subunits, Gi-Go D08-20-100-10-40-20-20-10-20+ #
- GTP-Binding Protein Alpha Subunit, Gi2 D08-20-100-10-40-20-20-10-20-10 #
- GTP-Binding Protein Alpha Subunits, Gq-G11 D08-20-100-10-40-20-20-10-30 #
- GTP-Binding Protein Alpha Subunits, Gs D08-20-100-10-40-20-20-10-40 #
- Transducin D08-20-100-10-40-20-20-20 #
- Monomeric GTP-Binding Proteins D08-20-100-10-40-20-30+ #
- ADP-Ribosylation Factors D08-20-100-10-40-20-30-10+ #
- ADP-Ribosylation Factor 1 D08-20-100-10-40-20-30-10-10 #
- \* ADP-Ribosylation Factor 6 D08-20-100-10-40-20-30-10-20 #
- rab GTP-Binding Proteins D08-20-100-10-40-20-30-20+ #
- rab1 GTP-Binding Proteins D08-20-100-10-40-20-30-20-10 #
- rab2 GTP-Binding Protein D08-20-100-10-40-20-30-20-20 #
- rab3 GTP-Binding Proteins D08-20-100-10-40-20-30-20-30+ #
- rab3A GTP-Binding Protein D08-20-100-10-40-20-30-20-30-10 #
- rab4 GTP-Binding Proteins D08-20-100-10-40-20-30-20-40 #
- rab5 GTP-Binding Proteins D08-20-100-10-40-20-30-20-50 #
- \* rab7 GTP-Binding Proteins D08-20-100-10-40-20-30-20-60 #
- rab27 GTP-Binding Proteins D08-20-100-10-40-20-30-20-70 #
- ral GTP-Binding Proteins D08-20-100-10-40-20-30-30 #
- ran GTP-Binding Protein D08-20-100-10-40-20-30-40 #
- rap GTP-Binding Proteins D08-20-100-10-40-20-30-50+ #
- rap1 GTP-Binding Proteins D08-20-100-10-40-20-30-50-10 #
- Ras Homolog Enriched in Brain Protein D08-20-100-10-40-20-30-60 #
- ras Proteins D08-20-100-10-40-20-30-70+ #
- ras癌原遺伝子タンパク質p21 D08-20-100-10-40-20-30-70-10 #
- v-ras癌遺伝子タンパク質p21 D08-20-100-10-40-20-30-70-20 #
- rho GTP-Binding Proteins D08-20-100-10-40-20-30-80+ #
- cdc42 GTP-Binding Protein D08-20-100-10-40-20-30-80-10 #
- rac GTP-Binding Proteins D08-20-100-10-40-20-30-80-20+ #
- rac1 GTP-Binding Protein D08-20-100-10-40-20-30-80-20-10 #
- rhoA GTP-Binding Protein D08-20-100-10-40-20-30-80-30 #
- rhoB GTP-Binding Protein D08-20-100-10-40-20-30-80-40 #
- rhoC GTP-Binding Protein D08-20-100-10-40-20-30-80-50 #
- Saccharomyces cerevisiae cdc42 GTP-Binding Protein D08-20-100-10-40-20-30-80-60 #
- Myxovirus Resistance Proteins D08-20-100-10-40-20-40 #
- Septins D08-20-100-10-40-20-50 #

**Nucleoside-Triphosphatase** D08-20-100-10-50  
**Pyrophosphatases** D08-20-100-10-60+  
     **Inorganic Diphosphatase** D08-20-100-10-60-10 #  
     **Thiamine Pyrophosphatase** D08-20-100-10-60-20  
**SAM Domain and HD Domain-Containing Protein 1** D08-20-100-10-70 #  
**Thiamin-Triphosphatase** D08-20-100-10-80  
**Adenosylhomocysteinase** D08-20-100-20  
**Amidohydrolases** D08-20-100-30+  
     **N-Acetylmuramoyl-L-alanine Amidase** D08-20-100-30-10  
     **Allophanate Hydrolase** D08-20-100-30-20  
     **Arylformamidase** D08-20-100-30-30  
     **Asparaginase** D08-20-100-30-40+ #  
         **Crisantaspase** D08-20-100-30-40-10 #  
         **Pegaspargase** D08-20-100-30-40-20 #  
     **Aspartylglucosylaminase** D08-20-100-30-50  
     **Beta-Lactamases** D08-20-100-30-60+  
         **Cephalosporinase** D08-20-100-30-60-10  
         **Penicillinase** D08-20-100-30-60-20  
     **Biotinidase** D08-20-100-30-70  
     **Ceramidase** D08-20-100-30-80+  
         **Acid Ceramidase** D08-20-100-30-80-10  
         **Alkaline Ceramidase** D08-20-100-30-80-20  
         **Neutral Ceramidase** D08-20-100-30-80-30  
     **Dihydroorotase** D08-20-100-30-90  
     **Glutaminase** D08-20-100-30-100  
     **Histone Deacetylases** D08-20-100-30-110+  
         **Group III Histone Deacetylases** D08-20-100-30-110-10+  
             **Sirtuins** D08-20-100-30-110-10-10+ #  
                 **Sirtuin 1** D08-20-100-30-110-10-10-10 #  
                 **Sirtuin 2** D08-20-100-30-110-10-10-20 #  
                 **Sirtuin 3** D08-20-100-30-110-10-10-30 #  
             **Histone Deacetylase 6** D08-20-100-30-110-20  
         **Mi-2 Nucleosome Remodeling and Deacetylase Complex** D08-20-100-30-110-30+ #  
             **Histone Deacetylase 1** D08-20-100-30-110-30-10 #  
             **Histone Deacetylase 2** D08-20-100-30-110-30-20 #  
             **Retinoblastoma-Binding Protein 4** D08-20-100-30-110-30-30 #  
             **Retinoblastoma-Binding Protein 7** D08-20-100-30-110-30-40 #  
         **Sin3 Histone Deacetylase and Corepressor Complex** D08-20-100-30-110-40+ #  
             **Histone Deacetylase 1** D08-20-100-30-110-40-10 #  
             **Histone Deacetylase 2** D08-20-100-30-110-40-20 #  
             **Retinoblastoma-Binding Protein 4** D08-20-100-30-110-40-30 #  
             **Retinoblastoma-Binding Protein 7** D08-20-100-30-110-40-40 #  
     **Nicotinamidase** D08-20-100-30-120  
     **Penicillin Amidase** D08-20-100-30-130  
     **Peptide-N4-(Acetyl-beta-glucosaminy)Asparagine Amidase** D08-20-100-30-140  
     **Pyroglutamate Hydrolase** D08-20-100-30-150  
     **Urease** D08-20-100-30-160  
**Aminohydrolases** D08-20-100-40+  
     **GTP Cyclohydrolase** D08-20-100-40-10  
     **Guanine Deaminase** D08-20-100-40-20  
     **Methenyltetrahydrofolate Cyclohydrolase** D08-20-100-40-30  
     **Nucleoside Deaminases** D08-20-100-40-40+  
         **Adenosine Deaminase** D08-20-100-40-40-10+  
             \* **Elapegademase** D08-20-100-40-40-10-10 #  
             **Pegademase** D08-20-100-40-40-10-20  
         **Cytidine Deaminase** D08-20-100-40-40-20+  
             **APOBEC Deaminases** D08-20-100-40-40-20-10+  
                 **APOBEC-1 Deaminase** D08-20-100-40-40-20-10-10  
                 **APOBEC-3G Deaminase** D08-20-100-40-40-20-10-20 #

- Cytosine Deaminase D08-20-100-40-40-30
- Nucleotide Deaminases D08-20-100-40-50+
- AMP Deaminase D08-20-100-40-50-10
- dCMP Deaminase D08-20-100-40-50-20
- Epoxide Hydrolases D08-20-100-50
- Esterases D08-20-100-60+
- Carboxylic Ester Hydrolases D08-20-100-60-10+
- Acetylesterase D08-20-100-60-10-10
- Acylglycerol Lipase D08-20-100-60-10-20
- Carboxylesterase D08-20-100-60-10-30
- Cholinesterases D08-20-100-60-10-40+
- Acetylcholinesterase D08-20-100-60-10-40-10
- Butyrylcholinesterase D08-20-100-60-10-40-20
- Dehydroascorbate D08-20-100-60-10-50
- Lipoprotein Lipase D08-20-100-60-10-60
- Naphthol AS D Esterase D08-20-100-60-10-70
- Phospholipases D08-20-100-60-10-80+ #
- Lysophospholipase D08-20-100-60-10-80-10
- Phospholipases A D08-20-100-60-10-80-20+
- Phospholipases A1 D08-20-100-60-10-80-20-10
- Phospholipases A2 D08-20-100-60-10-80-20-20+
- 1-Alkyl-2-acetylglycerophosphocholine Esterase D08-20-100-60-10-80-20-20-10
- Calcium-Independent Phospholipase A2 D08-20-100-60-10-80-20-20-20+
- Group VI Phospholipases A2 D08-20-100-60-10-80-20-20-20-10
- Peroxiredoxin VI D08-20-100-60-10-80-20-20-20-20 #
- Cytosolic Phospholipases A2 D08-20-100-60-10-80-20-20-30+
- Group IV Phospholipases A2 D08-20-100-60-10-80-20-20-30-10
- Peroxiredoxin VI D08-20-100-60-10-80-20-20-30-20 #
- Secretory Phospholipases A2 D08-20-100-60-10-80-20-20-40+
- Group I Phospholipases A2 D08-20-100-60-10-80-20-20-40-10+
- Group IA Phospholipases A2 D08-20-100-60-10-80-20-20-40-10-10
- Group IB Phospholipases A2 D08-20-100-60-10-80-20-20-40-10-20
- Group II Phospholipases A2 D08-20-100-60-10-80-20-20-40-20
- Group III Phospholipases A2 D08-20-100-60-10-80-20-20-40-30
- Group V Phospholipases A2 D08-20-100-60-10-80-20-20-40-40
- Group X Phospholipases A2 D08-20-100-60-10-80-20-20-40-50
- Sterol Esterase D08-20-100-60-10-90+
- Sebelipase Alfa D08-20-100-60-10-90-10
- Triacylglycerol Lipase D08-20-100-60-10-100+
- Pancrelipase D08-20-100-60-10-100-10 #
- Deoxyribonucleases D08-20-100-60-20+
- Endodeoxyribonucleases D08-20-100-60-20-10+ #
- Deoxyribonuclease (Pyrimidine Dimer) D08-20-100-60-20-10-10
- Deoxyribonuclease I D08-20-100-60-20-10-20+
- Dornase Alfa D08-20-100-60-20-10-20-10
- Streptodornase and Streptokinase D08-20-100-60-20-10-20-20 #
- Deoxyribonuclease IV (Phage T4-Induced) D08-20-100-60-20-10-30
- Holliday Junction Resolvases D08-20-100-60-20-10-40 #
- Micrococcal Nuclease D08-20-100-60-20-10-50 #
- Mismatch Repair Endonuclease PMS2 D08-20-100-60-20-10-60 #
- MRE11 Homologue Protein D08-20-100-60-20-10-70 #
- Single-Strand Specific DNA and RNA Endonucleases D08-20-100-60-20-10-80 #
- Transcription Activator-Like Effector Nucleases D08-20-100-60-20-10-90 #
- Zinc Finger Nucleases D08-20-100-60-20-10-100 #
- 制限酵素 D08-20-100-60-20-10-110+ #
- Type I Site-Specific Deoxyribonucleases D08-20-100-60-20-10-110-10 #
- Type II Site-Specific Deoxyribonucleases D08-20-100-60-20-10-110-20+ #
- Deoxyribonuclease BamHI D08-20-100-60-20-10-110-20-10 #
- Deoxyribonuclease EcoRI D08-20-100-60-20-10-110-20-20 #



- Deoxyribonuclease HindIII** D08-20-100-60-20-10-110-20-30 #  
**Deoxyribonuclease HpaII** D08-20-100-60-20-10-110-20-40 #  
**Type III Site-Specific Deoxyribonucleases** D08-20-100-60-20-10-110-30 #  
**Exodeoxyribonucleases** D08-20-100-60-20-20+ #  
**Exodeoxyribonuclease V** D08-20-100-60-20-20-10  
**MRE11 Homologue Protein** D08-20-100-60-20-20-20 #  
**Werner Syndrome Helicase** D08-20-100-60-20-20-30 #  
**Endonucleases** D08-20-100-60-30+  
**Endodeoxyribonucleases** D08-20-100-60-30-10+ #  
**\* CRISPR-Associated Protein 9** D08-20-100-60-30-10-10 #  
**Flap Endonucleases** D08-20-100-60-30-10-20  
**Holliday Junction Resolvases** D08-20-100-60-30-10-30 #  
**Micrococcal Nuclease** D08-20-100-60-30-10-40 #  
**MRE11 Homologue Protein** D08-20-100-60-30-10-50 #  
**Single-Strand Specific DNA and RNA Endonucleases** D08-20-100-60-30-10-60 #  
**Zinc Finger Nucleases** D08-20-100-60-30-10-70 #  
**制限酵素** D08-20-100-60-30-10-80+ #  
**Type I Site-Specific Deoxyribonucleases** D08-20-100-60-30-10-80-10 #  
**Type II Site-Specific Deoxyribonucleases** D08-20-100-60-30-10-80-20+ #  
**Deoxyribonuclease BamHI** D08-20-100-60-30-10-80-20-10 #  
**Deoxyribonuclease EcoRI** D08-20-100-60-30-10-80-20-20 #  
**Deoxyribonuclease HindIII** D08-20-100-60-30-10-80-20-30 #  
**Deoxyribonuclease HpaII** D08-20-100-60-30-10-80-20-40 #  
**Type III Site-Specific Deoxyribonucleases** D08-20-100-60-30-10-80-30 #  
**Endoribonucleases** D08-20-100-60-30-20+ #  
**Micrococcal Nuclease** D08-20-100-60-30-20-10 #  
**Pancreatic Ribonuclease** D08-20-100-60-30-20-20 #  
**Ribonuclease H** D08-20-100-60-30-20-30+ #  
**HIV Ribonuclease H** D08-20-100-60-30-20-30-10 #  
**Ribonuclease T1** D08-20-100-60-30-20-40 #  
**RNA-Induced Silencing Complex** D08-20-100-60-30-20-50+ #  
**Argonaute Proteins** D08-20-100-60-30-20-50-10 #  
**Single-Strand Specific DNA and RNA Endonucleases** D08-20-100-60-30-20-60 #  
**Exonucleases** D08-20-100-60-40+  
**Exodeoxyribonucleases** D08-20-100-60-40-10+ #  
**MRE11 Homologue Protein** D08-20-100-60-40-10-10 #  
**Werner Syndrome Helicase** D08-20-100-60-40-10-20 #  
**Exoribonucleases** D08-20-100-60-40-20 #  
**Phosphoric Diester Hydrolases** D08-20-100-60-50+  
**Annexin A3** D08-20-100-60-50-10 #  
**3',5'-Cyclic-AMP Phosphodiesterases** D08-20-100-60-50-20+ #  
**Cyclic Nucleotide Phosphodiesterases Type 1** D08-20-100-60-50-20-10 #  
**Cyclic Nucleotide Phosphodiesterases Type 2** D08-20-100-60-50-20-20 #  
**Cyclic Nucleotide Phosphodiesterases Type 3** D08-20-100-60-50-20-30 #  
**Cyclic Nucleotide Phosphodiesterases Type 4** D08-20-100-60-50-20-40 #  
**Cyclic Nucleotide Phosphodiesterases Type 5** D08-20-100-60-50-20-50 #  
**Cyclic Nucleotide Phosphodiesterases Type 6** D08-20-100-60-50-20-60 #  
**Cyclic Nucleotide Phosphodiesterases Type 7** D08-20-100-60-50-20-70 #  
**3',5'-Cyclic-GMP Phosphodiesterases** D08-20-100-60-50-30+ #  
**Cyclic Nucleotide Phosphodiesterases Type 1** D08-20-100-60-50-30-10 #  
**Cyclic Nucleotide Phosphodiesterases Type 2** D08-20-100-60-50-30-20 #  
**Cyclic Nucleotide Phosphodiesterases Type 5** D08-20-100-60-50-30-30 #  
**Cyclic Nucleotide Phosphodiesterases Type 6** D08-20-100-60-50-30-40 #  
**2',3'-Cyclic-Nucleotide Phosphodiesterases** D08-20-100-60-50-40+  
**2',3'-Cyclic Nucleotide 3'-Phosphodiesterase** D08-20-100-60-50-40-10 #  
**Glycerophosphoinositol Inositolphosphodiesterase** D08-20-100-60-50-50  
**Phosphodiesterase I** D08-20-100-60-50-60  
**Phospholipases** D08-20-100-60-50-70+ #  
**Phospholipase D** D08-20-100-60-50-70-10

- Type C Phospholipases** D08-20-100-60-50-70-20+
- Glycosylphosphatidylinositol Diacylglycerol-Lyase** D08-20-100-60-50-70-20-10
- Phosphatidylinositol Diacylglycerol-Lyase** D08-20-100-60-50-70-20-20 #
- Phosphoinositide Phospholipase C** D08-20-100-60-50-70-20-30+ #
- Phospholipase C Beta** D08-20-100-60-50-70-20-30-10 #
- Phospholipase C Delta** D08-20-100-60-50-70-20-30-20 #
- Phospholipase C Gamma** D08-20-100-60-50-70-20-30-30 #
- Sphingomyelin Phosphodiesterase** D08-20-100-60-50-80+
- \* **Olipudase Alfa** D08-20-100-60-50-80-10
- Phosphoric Monoester Hydrolases** D08-20-100-60-60+
- Acid Phosphatase** D08-20-100-60-60-10+
- Tartrate-Resistant Acid Phosphatase** D08-20-100-60-60-10-10 #
- \* **ADP-Ribose 1"-Phosphate Phosphatases** D08-20-100-60-60-20
- Alkaline Phosphatase** D08-20-100-60-60-30+
- Asfotase Alfa** D08-20-100-60-60-30-10 #
- Fructose-Bisphosphatase** D08-20-100-60-60-40
- Glucose-6-Phosphatase** D08-20-100-60-60-50
- Histidinol-Phosphatase** D08-20-100-60-60-60
- MAP Kinase Phosphatases** D08-20-100-60-60-70+ #
- Dual Specificity Phosphatase 1** D08-20-100-60-60-70-10 #
- Dual Specificity Phosphatase 2** D08-20-100-60-60-70-20 #
- Dual Specificity Phosphatase 3** D08-20-100-60-60-70-30 #
- Dual Specificity Phosphatase 6** D08-20-100-60-60-70-40 #
- 4-Nitrophenylphosphatase** D08-20-100-60-60-80
- Nucleotidases** D08-20-100-60-60-90+
- 5'-Nucleotidase** D08-20-100-60-60-90-10
- Phosphatidate Phosphatase** D08-20-100-60-60-100
- 6-Phosphofructo-2-kinase** D08-20-100-60-60-110 #
- Phosphoinositide Phosphatases** D08-20-100-60-60-120+
- Inositol Polyphosphate 5-Phosphatases** D08-20-100-60-60-120-10
- Phosphatidylinositol-3,4,5-trisphosphate 5-Phosphatases** D08-20-100-60-60-120-20
- Phosphoprotein Phosphatases** D08-20-100-60-60-130+ #
- Calcineurin** D08-20-100-60-60-130-10 #
- Dual-Specificity Phosphatases** D08-20-100-60-60-130-20+ #
- cdc25 Phosphatases** D08-20-100-60-60-130-20-10 #
- Dual Specificity Phosphatase 1** D08-20-100-60-60-130-20-20 #
- Dual Specificity Phosphatase 2** D08-20-100-60-60-130-20-30 #
- Dual Specificity Phosphatase 3** D08-20-100-60-60-130-20-40 #
- Dual Specificity Phosphatase 6** D08-20-100-60-60-130-20-50 #
- Glycogen-Synthase-D Phosphatase** D08-20-100-60-60-130-30 #
- Myosin-Light-Chain Phosphatase** D08-20-100-60-60-130-40 #
- Phosphorylase Phosphatase** D08-20-100-60-60-130-50 #
- Protein Phosphatase 1** D08-20-100-60-60-130-60 #
- Protein Phosphatase 2** D08-20-100-60-60-130-70 #
- Protein Phosphatase 2C** D08-20-100-60-60-130-80 #
- Pyruvate Dehydrogenase (Acetyl-Transferring)-Phosphatase** D08-20-100-60-60-130-90 #
- Tartrate-Resistant Acid Phosphatase** D08-20-100-60-60-130-100 #
- 4-Phytase** D08-20-100-60-60-140
- Protein Tyrosine Phosphatases** D08-20-100-60-60-150+ #
- Dual-Specificity Phosphatases** D08-20-100-60-60-150-10+ #
- cdc25 Phosphatases** D08-20-100-60-60-150-10-10 #
- Dual Specificity Phosphatase 1** D08-20-100-60-60-150-10-20 #
- Dual Specificity Phosphatase 2** D08-20-100-60-60-150-10-30 #
- Dual Specificity Phosphatase 3** D08-20-100-60-60-150-10-40 #
- Dual Specificity Phosphatase 6** D08-20-100-60-60-150-10-50 #
- Non-Receptor Protein Tyrosine Phosphatases** D08-20-100-60-60-150-20+ #
- Protein Tyrosine Phosphatase Non-Receptor Type 1** D08-20-100-60-60-150-20-10 #
- Protein Tyrosine Phosphatase Non-Receptor Type 2** D08-20-100-60-60-150-20-20 #
- Protein Tyrosine Phosphatase Non-Receptor Type 3** D08-20-100-60-60-150-20-30 #

Protein Tyrosine Phosphatase Non-Receptor Type 4	D08-20-100-60-60-150-20-40 #
Protein Tyrosine Phosphatase Non-Receptor Type 6	D08-20-100-60-60-150-20-50 #
Protein Tyrosine Phosphatase Non-Receptor Type 11	D08-20-100-60-60-150-20-60 #
Protein Tyrosine Phosphatase Non-Receptor Type 12	D08-20-100-60-60-150-20-70 #
Protein Tyrosine Phosphatase Non-Receptor Type 13	D08-20-100-60-60-150-20-80 #
Protein Tyrosine Phosphatase Non-Receptor Type 22	D08-20-100-60-60-150-20-90 #
Receptor-Like Protein Tyrosine Phosphatases	D08-20-100-60-60-150-30+ #
Receptor-Like Protein Tyrosine Phosphatases Class 1	D08-20-100-60-60-150-30-10+ #
Leukocyte Common Antigens	D08-20-100-60-60-150-30-10-10 #
Receptor-Like Protein Tyrosine Phosphatases Class 2	D08-20-100-60-60-150-30-20 #
Receptor-Like Protein Tyrosine Phosphatases Class 3	D08-20-100-60-60-150-30-30 #
Receptor-Like Protein Tyrosine Phosphatases Class 4	D08-20-100-60-60-150-30-40 #
Receptor-Like Protein Tyrosine Phosphatases Class 5	D08-20-100-60-60-150-30-50 #
Receptor-Like Protein Tyrosine Phosphatases Class 7	D08-20-100-60-60-150-30-60 #
Receptor-Like Protein Tyrosine Phosphatases Class 8	D08-20-100-60-60-150-30-70 #
SH2 Domain-Containing Protein Tyrosine Phosphatases	D08-20-100-60-60-150-40+ #
Protein Tyrosine Phosphatase Non-Receptor Type 6	D08-20-100-60-60-150-40-10 #
Protein Tyrosine Phosphatase Non-Receptor Type 11	D08-20-100-60-60-150-40-20 #
PTEN Phosphatase	D08-20-100-60-60-160 #
Phosphoric Triester Hydrolases	D08-20-100-60-70+
Aryldialkylphosphatase	D08-20-100-60-70-10
Ribonucleases	D08-20-100-60-80+
Endoribonucleases	D08-20-100-60-80-10+ #
Eosinophil Cationic Protein	D08-20-100-60-80-10-10 #
Eosinophil-Derived Neurotoxin	D08-20-100-60-80-10-20 #
Micrococcal Nuclease	D08-20-100-60-80-10-30 #
Pancreatic Ribonuclease	D08-20-100-60-80-10-40 #
Ribonuclease III	D08-20-100-60-80-10-50
Ribonuclease H	D08-20-100-60-80-10-60+ #
HIV Ribonuclease H	D08-20-100-60-80-10-60-10 #
Ribonuclease P	D08-20-100-60-80-10-70 #
Ribonuclease T1	D08-20-100-60-80-10-80 #
RNA-Induced Silencing Complex	D08-20-100-60-80-10-90+ #
Argonaute Proteins	D08-20-100-60-80-10-90-10 #
Single-Strand Specific DNA and RNA Endonucleases	D08-20-100-60-80-10-100+ #
* Uridylate-Specific Endoribonucleases	D08-20-100-60-80-10-100-10
Exoribonucleases	D08-20-100-60-80-20 #
SAM Domain and HD Domain-Containing Protein 1	D08-20-100-60-80-30 #
エクソソーム多酵素リボヌクレアーゼ複合体	D08-20-100-60-80-40 #
Sulfatases	D08-20-100-60-90+
Arylsulfatases	D08-20-100-60-90-10+
N-Acetylgalactosamine-4-Sulfatase	D08-20-100-60-90-10-10+ #
Galsulfase	D08-20-100-60-90-10-10-10 #
Cerebroside-Sulfatase	D08-20-100-60-90-10-20
Steryl-Sulfatase	D08-20-100-60-90-10-30
Chondroitinases and Chondroitin Lyases	D08-20-100-60-90-20+ #
Chondroitinsulfatases	D08-20-100-60-90-20-10+
N-Acetylgalactosamine-4-Sulfatase	D08-20-100-60-90-20-10-10+ #
Galsulfase	D08-20-100-60-90-20-10-10-10 #
N-Acetylgalactosamine-6-sulfatase	D08-20-100-60-90-20-10-20
Chondro-4-Sulfatase	D08-20-100-60-90-20-10-30
Elosulfase Alfa	D08-20-100-60-90-20-10-40
Iduronate-2-Sulfatase	D08-20-100-60-90-30+
Idursulfase	D08-20-100-60-90-30-10
* Idursulfase Beta	D08-20-100-60-90-30-20
* Pabinafusp Alfa	D08-20-100-60-90-30-30 #
Thiolester Hydrolases	D08-20-100-60-100+
Acetyl-CoA Hydrolase	D08-20-100-60-100-10
Fatty Acid Synthase	D08-20-100-60-100-20+ #

- Fatty Acid Synthase, Type I D08-20-100-60-100-20-10 #
- Fatty Acid Synthase, Type II D08-20-100-60-100-20-20 #
- Palmitoyl-CoA Hydrolase D08-20-100-60-100-30
- Ubiquitin Thiolesterase D08-20-100-60-100-40 #
- Glycoside Hydrolases D08-20-100-70+
- Alpha-L-Fucosidase D08-20-100-70-10
- Amylases D08-20-100-70-20+
- Alpha-Amylases D08-20-100-70-20-10+
- Pancreatic Alpha-Amylases D08-20-100-70-20-10-10
- Salivary Alpha-Amylases D08-20-100-70-20-10-20 #
- Beta-Amylase D08-20-100-70-20-20
- Beta-Fructofuranosidase D08-20-100-70-30
- Beta-Glucuronidase D08-20-100-70-40+
- \* Klotho Proteins D08-20-100-70-40-10 #
- \* Vestronidase Alfa D08-20-100-70-40-20
- Chitinases D08-20-100-70-50+
- Chitinase-3-Like Protein 1 D08-20-100-70-50-10 #
- Dextranase D08-20-100-70-60
- Disaccharidases D08-20-100-70-70+
- Sucrose Alpha D-Glucohydrolase D08-20-100-70-70-10+
- Sucrase-Isomaltase Complex D08-20-100-70-70-10-10 #
- Trehalase D08-20-100-70-70-20
- Exo-Alpha-Sialidase D08-20-100-70-80
- Galactosidases D08-20-100-70-90+
- Alpha-Galactosidase D08-20-100-70-90-10+
- Agalsidase Alfa D08-20-100-70-90-10-10 #
- Agalsidase Beta D08-20-100-70-90-10-20 #
- Beta-Galactosidase D08-20-100-70-90-20+
- Lactase D08-20-100-70-90-20-10+
- Glycosylceramidase D08-20-100-70-90-20-10-10 #
- Tilactase D08-20-100-70-90-20-10-20 #
- Galactosylceramidase D08-20-100-70-90-30
- Galactosylgalactosylglucosylceramidase D08-20-100-70-90-40
- Glucosidases D08-20-100-70-100+
- Alpha-Glucosidases D08-20-100-70-100-10+
- Alglucosidase Alfa D08-20-100-70-100-10-10
- \* Avalglucosidase Alfa D08-20-100-70-100-10-20
- Cellulases D08-20-100-70-100-20+
- Beta-Glucosidase D08-20-100-70-100-20-10
- Cellulase D08-20-100-70-100-20-20
- Cellulose 1,4-Beta-Cellobiosidase D08-20-100-70-100-20-30
- Endo-1,3(4)-Beta-Glucanase D08-20-100-70-100-20-40
- Glucan Endo-1,3-Beta-D-Glucosidase D08-20-100-70-100-20-50
- Glucan 1,3-Beta-Glucosidase D08-20-100-70-100-20-60
- Glucan 1,4-Beta-Glucosidase D08-20-100-70-100-20-70
- Glucan 1,4-Alpha-Glucosidase D08-20-100-70-100-30
- Glucosylceramidase D08-20-100-70-100-40+
- Alglucerase D08-20-100-70-100-40-10
- Imiglucerase D08-20-100-70-100-40-20
- Velaglucerase Alfa D08-20-100-70-100-40-30
- Glycogen Debranching Enzyme System D08-20-100-70-100-50 #
- Glycosylceramidase D08-20-100-70-100-60 #
- N-Glycosyl Hydrolases D08-20-100-70-110+
- DNA N-Glycosidase D08-20-100-70-110-10+ #
- DNA-Formamidopyrimidine Glycosylase D08-20-100-70-110-10-10 #
- Thymine DNA Glycosylase D08-20-100-70-110-10-20 #
- NAD<sup>+</sup> Nucleosidase D08-20-100-70-110-20+ #
- ADP-Ribosyl Cyclase D08-20-100-70-110-20-10+ #
- ADP-Ribosyl Cyclase 1 D08-20-100-70-110-20-10-10 #

- リボソーム不活性化タンパク質 D08-20-100-70-110-30+ #
  - リボソーム不活性化タンパク質1型 D08-20-100-70-110-30-10+ #
    - \* Saporin D08-20-100-70-110-30-10-10 #
  - リボソーム不活性化タンパク質2型 D08-20-100-70-110-30-20+ #
    - Abrin D08-20-100-70-110-30-20-10 #
    - Ricin D08-20-100-70-110-30-20-20 #
    - Shiga Toxins D08-20-100-70-110-30-20-30+ #
      - Shiga Toxin D08-20-100-70-110-30-20-30-10 #
      - Shiga Toxin 1 D08-20-100-70-110-30-20-30-20 #
      - Shiga Toxin 2 D08-20-100-70-110-30-20-30-30 #
- Hexosaminidases D08-20-100-70-120+
  - Alpha-N-Acetylgalactosaminidase D08-20-100-70-120-10
  - Beta-N-Acetylgalactosaminidase D08-20-100-70-120-20
  - Beta-N-Acetylhexosaminidases D08-20-100-70-120-30+
    - Acetylglucosaminidase D08-20-100-70-120-30-10
    - Hexosaminidase A D08-20-100-70-120-30-20+
      - Beta-Hexosaminidase Alpha Chain D08-20-100-70-120-30-20-10
      - Beta-Hexosaminidase Beta Chain D08-20-100-70-120-30-20-20 #
    - Hexosaminidase B D08-20-100-70-120-30-30+
      - Beta-Hexosaminidase Beta Chain D08-20-100-70-120-30-30-10 #
  - Mannosyl-Glycoprotein Endo-Beta-N-Acetylglucosaminidase D08-20-100-70-120-40
- Hyaluronoglucosaminidase D08-20-100-70-130+ #
  - \* Vorhyaluronidase Alfa D08-20-100-70-130-10 #
- L-Iduronidase D08-20-100-70-140+
  - Laronidase D08-20-100-70-140-10
- Isoamylase D08-20-100-70-150
- Lysozyme D08-20-100-70-160 #
- Mannosidases D08-20-100-70-170+
  - Alpha-Mannosidase D08-20-100-70-170-10
  - Beta-Mannosidase D08-20-100-70-170-20
- Oligo-1,6-Glucosidase D08-20-100-70-180+
  - Sucrase-Isomaltase Complex D08-20-100-70-180-10 #
- Polygalacturonase D08-20-100-70-190
- Xylosidases D08-20-100-70-200+
  - Endo-1,4-Beta-Xylanase D08-20-100-70-200-10
  - Xylan Endo-1,3-Beta-Xylosidase D08-20-100-70-200-20
- Pancreatin D08-20-100-80 #
- Peptide Hydrolases D08-20-100-90+
  - Aspartic Acid Proteases D08-20-100-90-10+
    - Aspartic Acid Endopeptidases D08-20-100-90-10-10+ #
      - Cathepsin D D08-20-100-90-10-10-10 #
      - Cathepsin E D08-20-100-90-10-10-20 #
      - Chymosin D08-20-100-90-10-10-30 #
      - Endothelin-Converting Enzymes D08-20-100-90-10-10-40 #
      - HIV Protease D08-20-100-90-10-10-50 #
      - Pepsin A D08-20-100-90-10-10-60 #
      - Renin D08-20-100-90-10-10-70 #
  - ATP-Dependent Proteases D08-20-100-90-20+ #
    - ATP-Dependent Endopeptidases D08-20-100-90-20-10+ #
      - Endopeptidase Clp D08-20-100-90-20-10-10 #
      - Endopeptidase La D08-20-100-90-20-10-20 #
- Cathepsins D08-20-100-90-30+
  - Cathepsin A D08-20-100-90-30-10 #
  - Cathepsin B D08-20-100-90-30-20 #
  - Cathepsin C D08-20-100-90-30-30 #
  - Cathepsin D D08-20-100-90-30-40 #
  - Cathepsin E D08-20-100-90-30-50 #
  - Cathepsin F D08-20-100-90-30-60 #
  - Cathepsin G D08-20-100-90-30-70 #

- Cathepsin H D08-20-100-90-30-80 #
- Cathepsin K D08-20-100-90-30-90 #
- Cathepsin L D08-20-100-90-30-100 #
- Cathepsin W D08-20-100-90-30-110 #
- Cathepsin Z D08-20-100-90-30-120 #
- Cysteine Proteases** D08-20-100-90-40+
- Cathepsin C D08-20-100-90-40-10 #
- Cathepsin Z D08-20-100-90-40-20 #
- Cysteine Endopeptidases** D08-20-100-90-40-30+ #
  - Bromelains D08-20-100-90-40-30-10 #
  - \* **3C Viral Proteases** D08-20-100-90-40-30-20+ #
    - \* **Coronavirus 3C Proteases** D08-20-100-90-40-30-20-10 #
  - Calpain D08-20-100-90-40-30-30 #
  - Caspases** D08-20-100-90-40-30-40+ #
    - Effector Caspases** D08-20-100-90-40-30-40-10+ #
      - Caspase 3 D08-20-100-90-40-30-40-10-10 #
      - Caspase 6 D08-20-100-90-40-30-40-10-20 #
      - Caspase 7 D08-20-100-90-40-30-40-10-30 #
      - Caspase 14 D08-20-100-90-40-30-40-10-40 #
    - Initiator Caspases** D08-20-100-90-40-30-40-20+ #
      - Caspase 1 D08-20-100-90-40-30-40-20-10 #
      - Caspase 2 D08-20-100-90-40-30-40-20-20 #
      - Caspase 8 D08-20-100-90-40-30-40-20-30 #
      - Caspase 9 D08-20-100-90-40-30-40-20-40 #
      - Caspase 10 D08-20-100-90-40-30-40-20-50 #
      - Caspase 12 D08-20-100-90-40-30-40-20-60 #
  - Mucosa-Associated Lymphoid Tissue Lymphoma Translocation 1 Protein** D08-20-100-90-40-30-40-30 #
  - Cathepsin B D08-20-100-90-40-30-50 #
  - Cathepsin F D08-20-100-90-40-30-60 #
  - Cathepsin H D08-20-100-90-40-30-70 #
  - Cathepsin K D08-20-100-90-40-30-80 #
  - Cathepsin L D08-20-100-90-40-30-90 #
  - Cathepsin W D08-20-100-90-40-30-100 #
  - Chymopapain D08-20-100-90-40-30-110 #
  - Ficain D08-20-100-90-40-30-120 #
  - \* **Gingipain Cysteine Endopeptidases** D08-20-100-90-40-30-130
    - Papain D08-20-100-90-40-30-140 #
    - Separase D08-20-100-90-40-30-150 #
  - \* **Viral Papain-Like Proteases** D08-20-100-90-40-30-160+ #
    - \* **Coronavirus Papain-Like Proteases** D08-20-100-90-40-30-160-10 #
- Endopeptidases** D08-20-100-90-50+
  - Amyloid Precursor Protein Secretases** D08-20-100-90-50-10
  - Aspartic Acid Endopeptidases** D08-20-100-90-50-20+ #
    - Cathepsin D D08-20-100-90-50-20-10 #
    - Cathepsin E D08-20-100-90-50-20-20 #
    - Chymosin D08-20-100-90-50-20-30 #
    - Endothelin-Converting Enzymes** D08-20-100-90-50-20-40 #
    - HIV Protease D08-20-100-90-50-20-50 #
    - Pepsin A D08-20-100-90-50-20-60 #
    - Renin D08-20-100-90-50-20-70 #
  - ATP-Dependent Endopeptidases** D08-20-100-90-50-30+ #
    - Endopeptidase Clp D08-20-100-90-50-30-10 #
    - Endopeptidase La D08-20-100-90-50-30-20 #
  - Brinolase D08-20-100-90-50-40 #
  - Coagulase D08-20-100-90-50-50 #
  - Cysteine Endopeptidases** D08-20-100-90-50-60+ #
    - Bromelains D08-20-100-90-50-60-10 #
    - Calpain D08-20-100-90-50-60-20 #
    - Caspases D08-20-100-90-50-60-30+ #

- Effector Caspases** D08-20-100-90-50-60-30-10+ #
- Caspase 3** D08-20-100-90-50-60-30-10-10 #
  - Caspase 6** D08-20-100-90-50-60-30-10-20 #
  - Caspase 7** D08-20-100-90-50-60-30-10-30 #
  - Caspase 14** D08-20-100-90-50-60-30-10-40 #
- Initiator Caspases** D08-20-100-90-50-60-30-20+ #
- Caspase 1** D08-20-100-90-50-60-30-20-10 #
  - Caspase 2** D08-20-100-90-50-60-30-20-20 #
  - Caspase 8** D08-20-100-90-50-60-30-20-30 #
  - Caspase 9** D08-20-100-90-50-60-30-20-40 #
  - Caspase 10** D08-20-100-90-50-60-30-20-50 #
  - Caspase 12** D08-20-100-90-50-60-30-20-60 #
- Mucosa-Associated Lymphoid Tissue Lymphoma Translocation 1 Protein** D08-20-100-90-50-60-30-30 #
- Cathepsin B** D08-20-100-90-50-60-40 #
- Cathepsin F** D08-20-100-90-50-60-50 #
- Cathepsin H** D08-20-100-90-50-60-60 #
- Cathepsin K** D08-20-100-90-50-60-70 #
- Cathepsin L** D08-20-100-90-50-60-80 #
- Cathepsin W** D08-20-100-90-50-60-90 #
- Chymopapain** D08-20-100-90-50-60-100 #
- Ficain** D08-20-100-90-50-60-110 #
- Papain** D08-20-100-90-50-60-120 #
- Separase** D08-20-100-90-50-60-130 #
- Metalloendopeptidases** D08-20-100-90-50-70+ #
- Alfimeprase** D08-20-100-90-50-70-10 #
- Botulinum Toxins** D08-20-100-90-50-70-20+ #
- Botulinum Toxin Type A** D08-20-100-90-50-70-20-10 #
  - Botulinum Toxin Type B** D08-20-100-90-50-70-20-20 #
- Collagenases** D08-20-100-90-50-70-30+ #
- Matrix Metalloproteinase 1** D08-20-100-90-50-70-30-10 #
  - Matrix Metalloproteinase 2** D08-20-100-90-50-70-30-20 #
  - Matrix Metalloproteinase 8** D08-20-100-90-50-70-30-30 #
  - Matrix Metalloproteinase 9** D08-20-100-90-50-70-30-40 #
  - Matrix Metalloproteinase 13** D08-20-100-90-50-70-30-50 #
  - Microbial Collagenase** D08-20-100-90-50-70-30-60 #
- Endothelin-Converting Enzymes** D08-20-100-90-50-70-40 #
- Gelatinases** D08-20-100-90-50-70-50+ #
- Matrix Metalloproteinase 2** D08-20-100-90-50-70-50-10 #
  - Matrix Metalloproteinase 9** D08-20-100-90-50-70-50-20 #
- Insulysin** D08-20-100-90-50-70-60 #
- Lysostaphin** D08-20-100-90-50-70-70 #
- Matrix Metalloproteinases** D08-20-100-90-50-70-80+ #
- Membrane-Associated Matrix Metalloproteinases** D08-20-100-90-50-70-80-10+ #
- Matrix Metalloproteinase 14** D08-20-100-90-50-70-80-10-10 #
  - Matrix Metalloproteinase 15** D08-20-100-90-50-70-80-10-20 #
  - Matrix Metalloproteinase 16** D08-20-100-90-50-70-80-10-30 #
  - Matrix Metalloproteinase 17** D08-20-100-90-50-70-80-10-40 #
- Secreted Matrix Metalloproteinases** D08-20-100-90-50-70-80-20+ #
- Matrix Metalloproteinase 1** D08-20-100-90-50-70-80-20-10 #
  - Matrix Metalloproteinase 2** D08-20-100-90-50-70-80-20-20 #
  - Matrix Metalloproteinase 3** D08-20-100-90-50-70-80-20-30 #
  - Matrix Metalloproteinase 7** D08-20-100-90-50-70-80-20-40 #
  - Matrix Metalloproteinase 8** D08-20-100-90-50-70-80-20-50 #
  - Matrix Metalloproteinase 9** D08-20-100-90-50-70-80-20-60 #
  - Matrix Metalloproteinase 10** D08-20-100-90-50-70-80-20-70 #
  - Matrix Metalloproteinase 11** D08-20-100-90-50-70-80-20-80 #
  - Matrix Metalloproteinase 12** D08-20-100-90-50-70-80-20-90 #
  - Matrix Metalloproteinase 13** D08-20-100-90-50-70-80-20-100 #
  - Matrix Metalloproteinase 20** D08-20-100-90-50-70-80-20-110 #

- 骨形成因子-1 D08-20-100-90-50-70-80-20-120 #
- Nepilysin D08-20-100-90-50-70-90 #
- PHEX Phosphate Regulating Neutral Endopeptidase D08-20-100-90-50-70-100 #
- Pregnancy-Associated Plasma Protein-A D08-20-100-90-50-70-110 #
- Procollagen N-Endopeptidase D08-20-100-90-50-70-120 #
- Pronase D08-20-100-90-50-70-130 #
- Thermolysin D08-20-100-90-50-70-140 #
- Serine Endopeptidases D08-20-100-90-50-80+ #
- Acrosin D08-20-100-90-50-80-10 #
- Cathepsin G D08-20-100-90-50-80-20 #
- Chymases D08-20-100-90-50-80-30 #
- Chymotrypsin D08-20-100-90-50-80-40 #
- Enteropeptidase D08-20-100-90-50-80-50 #
- Furin D08-20-100-90-50-80-60 #
- Granzymes D08-20-100-90-50-80-70 #
- High-Temperature Requirement A Serine Peptidase 1 D08-20-100-90-50-80-80 #
- High-Temperature Requirement A Serine Peptidase 2 D08-20-100-90-50-80-90 #
- Kallikreins D08-20-100-90-50-80-100+ #
- Plasma Kallikrein D08-20-100-90-50-80-100-10 #
- Prekallikrein D08-20-100-90-50-80-100-20 #
- Tissue Kallikreins D08-20-100-90-50-80-100-30 #
- 前立腺特異抗原 D08-20-100-90-50-80-100-40 #
- Lactoferrin D08-20-100-90-50-80-110 #
- Mannose-Binding Protein-Associated Serine Proteases D08-20-100-90-50-80-120 #
- Myeloblastin D08-20-100-90-50-80-130 #
- Pancreatic Elastase D08-20-100-90-50-80-140+ #
- Leukocyte Elastase D08-20-100-90-50-80-140-10 #
- Peptidase K D08-20-100-90-50-80-150 #
- Plasmin D08-20-100-90-50-80-160+ #
- Ocriplasmin D08-20-100-90-50-80-160-10 #
- Plasminogen Activators D08-20-100-90-50-80-170+ #
- Anistreplase D08-20-100-90-50-80-170-10 #
- Desmoteplase D08-20-100-90-50-80-170-20 #
- Monteplase D08-20-100-90-50-80-170-30 #
- Silteplase D08-20-100-90-50-80-170-40 #
- \* Prolyl Oligopeptidases D08-20-100-90-50-80-180
- Pronase D08-20-100-90-50-80-190 #
- Proprotein Convertase 1 D08-20-100-90-50-80-200 #
- Proprotein Convertase 2 D08-20-100-90-50-80-210 #
- Proprotein Convertase 5 D08-20-100-90-50-80-220 #
- Proprotein Convertase 9 D08-20-100-90-50-80-230 #
- \* Reelin Protein D08-20-100-90-50-80-240 #
- Sfericase D08-20-100-90-50-80-250 #
- Subtilisins D08-20-100-90-50-80-260+ #
- Subtilisin D08-20-100-90-50-80-260-10 #
- Thrombin D08-20-100-90-50-80-270+ #
- Rusalatide D08-20-100-90-50-80-270-10 #
- Thrombin Alfa D08-20-100-90-50-80-270-20 #
- Tissue Plasminogen Activator D08-20-100-90-50-80-280+ #
- Duteplase D08-20-100-90-50-80-280-10 #
- Lanoteplase D08-20-100-90-50-80-280-20 #
- Nateplase D08-20-100-90-50-80-280-30 #
- Pamiteplase D08-20-100-90-50-80-280-40 #
- Reteplase D08-20-100-90-50-80-280-50 #
- Tenecteplase D08-20-100-90-50-80-280-60 #
- Trypsin D08-20-100-90-50-80-290 #
- Tryptases D08-20-100-90-50-80-300 #
- U-Plasminogen Activator D08-20-100-90-50-80-310+ #
- Nasaruplase D08-20-100-90-50-80-310-10 #



**Saruplase** D08-20-100-90-50-80-310-20 #  
**Venombin A** D08-20-100-90-50-80-320+ #  
**Ancrod** D08-20-100-90-50-80-320-10 #  
**Batroxobin** D08-20-100-90-50-80-320-20 #  
**活性化血液凝固第VII因子** D08-20-100-90-50-80-330+ #  
**Eptacog Alfa** D08-20-100-90-50-80-330-10 #  
**活性化血液凝固第IX因子** D08-20-100-90-50-80-340 #  
**活性化血液凝固第X因子** D08-20-100-90-50-80-350+ #  
**\* Andexanet Alfa** D08-20-100-90-50-80-350-10 #  
**活性化血液凝固第XI因子** D08-20-100-90-50-80-360 #  
**活性化血液凝固第XII因子** D08-20-100-90-50-80-370 #  
**補体因子B** D08-20-100-90-50-80-380 #  
**補体因子D** D08-20-100-90-50-80-390 #  
**補体因子I** D08-20-100-90-50-80-400 #  
**Streptokinase** D08-20-100-90-50-90+ #  
**Anistreplase** D08-20-100-90-50-90-10 #  
**Streptodornase and Streptokinase** D08-20-100-90-50-90-20 #  
**Ubiquitin-Specific Protease** D08-20-100-90-50-100+ #  
**COP9 Signalosome Complex** D08-20-100-90-50-100-10 #  
**Ubiquitin-Specific Peptidase 7** D08-20-100-90-50-100-20 #  
**腫瘍壊死因子アルファ誘導タンパク質3** D08-20-100-90-50-100-30 #  
**Exopeptidases** D08-20-100-90-60+  
**Aminopeptidases** D08-20-100-90-60-10+  
**CD13抗原** D08-20-100-90-60-10-10 #  
**Cystinyl Aminopeptidase** D08-20-100-90-60-10-20 #  
**Glutamyl Aminopeptidase** D08-20-100-90-60-10-30 #  
**Leucyl Aminopeptidase** D08-20-100-90-60-10-40 #  
**Methionyl Aminopeptidase** D08-20-100-90-60-10-50 #  
**Pyroglutamyl-Peptidase I** D08-20-100-90-60-10-60 #  
**\* Tripeptidyl Peptidase I** D08-20-100-90-60-10-70 #  
**Carboxypeptidases** D08-20-100-90-60-20+  
**\* Angiotensin-Converting Enzyme 2** D08-20-100-90-60-20-10 #  
**Carboxypeptidase A** D08-20-100-90-60-20-20 #  
**Carboxypeptidase B** D08-20-100-90-60-20-30 #  
**Carboxypeptidase E** D08-20-100-90-60-20-40 #  
**Carboxypeptidase U** D08-20-100-90-60-20-50 #  
**Cathepsin A** D08-20-100-90-60-20-60 #  
**Cathepsin Z** D08-20-100-90-60-20-70 #  
**Gamma-Glutamyl Hydrolase** D08-20-100-90-60-20-80+  
**Glucarpidase** D08-20-100-90-60-20-80-10 #  
**Glutamate Carboxypeptidase II** D08-20-100-90-60-20-90 #  
**Lysine Carboxypeptidase** D08-20-100-90-60-20-100 #  
**Muramoylpentapeptide Carboxypeptidase** D08-20-100-90-60-20-110 #  
**Serine-Type D-Ala-D-Ala Carboxypeptidase** D08-20-100-90-60-20-120 #  
**Dipeptidases** D08-20-100-90-60-30 #  
**Dipeptidyl-Peptidases and Tripeptidyl-Peptidases** D08-20-100-90-60-40+  
**Cathepsin C** D08-20-100-90-60-40-10 #  
**\* Cerliponase Alfa** D08-20-100-90-60-40-20 #  
**Dipeptidyl Peptidase 4** D08-20-100-90-60-40-30 #  
**Peptidyl-Dipeptidase A** D08-20-100-90-60-40-40 #  
**\* Tripeptidyl Peptidase I** D08-20-100-90-60-40-50 #  
**Metalloexopeptidases** D08-20-100-90-60-50+ #  
**Carboxypeptidase A** D08-20-100-90-60-50-10 #  
**Carboxypeptidase B** D08-20-100-90-60-50-20 #  
**Carboxypeptidase E** D08-20-100-90-60-50-30 #  
**Carboxypeptidase U** D08-20-100-90-60-50-40 #  
**CD13抗原** D08-20-100-90-60-50-50 #  
**Cystinyl Aminopeptidase** D08-20-100-90-60-50-60 #  
**Glutamate Carboxypeptidase II** D08-20-100-90-60-50-70 #

**Glutamyl Aminopeptidase** D08-20-100-90-60-50-80 #  
**Leucyl Aminopeptidase** D08-20-100-90-60-50-90 #  
**Lysine Carboxypeptidase** D08-20-100-90-60-50-100 #  
**Metalloproteases** D08-20-100-90-70+  
**Metalloendopeptidases** D08-20-100-90-70-10+ #  
**ADAM Proteins** D08-20-100-90-70-10-10+ #  
**ADAM10 Protein** D08-20-100-90-70-10-10-10 #  
**ADAM12 Protein** D08-20-100-90-70-10-10-20 #  
**ADAM17 Protein** D08-20-100-90-70-10-10-30 #  
**ADAMTS Proteins** D08-20-100-90-70-10-10-40+ #  
**ADAMTS1 Protein** D08-20-100-90-70-10-10-40-10 #  
**ADAMTS4 Protein** D08-20-100-90-70-10-10-40-20 #  
**ADAMTS5 Protein** D08-20-100-90-70-10-10-40-30 #  
**ADAMTS7 Protein** D08-20-100-90-70-10-10-40-40 #  
**ADAMTS9 Protein** D08-20-100-90-70-10-10-40-50 #  
**ADAMTS13 Protein** D08-20-100-90-70-10-10-40-60 #  
**Fertilins** D08-20-100-90-70-10-10-50 #  
**Alfimeprase** D08-20-100-90-70-10-20 #  
**Botulinum Toxins** D08-20-100-90-70-10-30+ #  
**Botulinum Toxin Type A** D08-20-100-90-70-10-30-10 #  
**Botulinum Toxin Type B** D08-20-100-90-70-10-30-20 #  
**Collagenases** D08-20-100-90-70-10-40+ #  
**Matrix Metalloproteinase 1** D08-20-100-90-70-10-40-10 #  
**Matrix Metalloproteinase 2** D08-20-100-90-70-10-40-20 #  
**Matrix Metalloproteinase 8** D08-20-100-90-70-10-40-30 #  
**Matrix Metalloproteinase 9** D08-20-100-90-70-10-40-40 #  
**Matrix Metalloproteinase 13** D08-20-100-90-70-10-40-50 #  
**Microbial Collagenase** D08-20-100-90-70-10-40-60 #  
**Endothelin-Converting Enzymes** D08-20-100-90-70-10-50 #  
**Gelatinases** D08-20-100-90-70-10-60+ #  
**Matrix Metalloproteinase 2** D08-20-100-90-70-10-60-10 #  
**Matrix Metalloproteinase 9** D08-20-100-90-70-10-60-20 #  
**Insulysin** D08-20-100-90-70-10-70 #  
**Lysostaphin** D08-20-100-90-70-10-80 #  
**Matrix Metalloproteinases** D08-20-100-90-70-10-90+ #  
**Membrane-Associated Matrix Metalloproteinases** D08-20-100-90-70-10-90-10+ #  
**Matrix Metalloproteinase 14** D08-20-100-90-70-10-90-10-10 #  
**Matrix Metalloproteinase 15** D08-20-100-90-70-10-90-10-20 #  
**Matrix Metalloproteinase 16** D08-20-100-90-70-10-90-10-30 #  
**Matrix Metalloproteinase 17** D08-20-100-90-70-10-90-10-40 #  
**Secreted Matrix Metalloproteinases** D08-20-100-90-70-10-90-20+ #  
**Matrix Metalloproteinase 1** D08-20-100-90-70-10-90-20-10 #  
**Matrix Metalloproteinase 2** D08-20-100-90-70-10-90-20-20 #  
**Matrix Metalloproteinase 3** D08-20-100-90-70-10-90-20-30 #  
**Matrix Metalloproteinase 7** D08-20-100-90-70-10-90-20-40 #  
**Matrix Metalloproteinase 8** D08-20-100-90-70-10-90-20-50 #  
**Matrix Metalloproteinase 9** D08-20-100-90-70-10-90-20-60 #  
**Matrix Metalloproteinase 10** D08-20-100-90-70-10-90-20-70 #  
**Matrix Metalloproteinase 11** D08-20-100-90-70-10-90-20-80 #  
**Matrix Metalloproteinase 12** D08-20-100-90-70-10-90-20-90 #  
**Matrix Metalloproteinase 13** D08-20-100-90-70-10-90-20-100 #  
**Matrix Metalloproteinase 20** D08-20-100-90-70-10-90-20-110 #  
**Tolloid-Like Metalloproteinases** D08-20-100-90-70-10-90-20-120+ #  
**骨形成因子-1** D08-20-100-90-70-10-90-20-120-10 #  
**Nepilysin** D08-20-100-90-70-10-100 #  
**PHEx Phosphate Regulating Neutral Endopeptidase** D08-20-100-90-70-10-110 #  
**Pregnancy-Associated Plasma Protein-A** D08-20-100-90-70-10-120 #  
**Procollagen N-Endopeptidase** D08-20-100-90-70-10-130 #  
**Pronase** D08-20-100-90-70-10-140 #

- Thermolysin** D08-20-100-90-70-10-150 #  
**Metalloexopeptidases** D08-20-100-90-70-20+ #  
**Carboxypeptidase A** D08-20-100-90-70-20-10 #  
**Carboxypeptidase B** D08-20-100-90-70-20-20 #  
**Carboxypeptidase E** D08-20-100-90-70-20-30 #  
**Carboxypeptidase U** D08-20-100-90-70-20-40 #  
**CD13抗原** D08-20-100-90-70-20-50 #  
**Cystinyl Aminopeptidase** D08-20-100-90-70-20-60 #  
**Glutamate Carboxypeptidase II** D08-20-100-90-70-20-70 #  
**Glutamyl Aminopeptidase** D08-20-100-90-70-20-80 #  
**Leucyl Aminopeptidase** D08-20-100-90-70-20-90 #  
**Lysine Carboxypeptidase** D08-20-100-90-70-20-100 #  
**Proprotein Convertases** D08-20-100-90-80+  
**Carboxypeptidase B** D08-20-100-90-80-10 #  
**Carboxypeptidase E** D08-20-100-90-80-20 #  
**Carboxypeptidase U** D08-20-100-90-80-30 #  
**Furin** D08-20-100-90-80-40 #  
**Proprotein Convertase 1** D08-20-100-90-80-50 #  
**Proprotein Convertase 2** D08-20-100-90-80-60 #  
**Proprotein Convertase 5** D08-20-100-90-80-70 #  
**Proprotein Convertase 9** D08-20-100-90-80-80 #  
**Renin** D08-20-100-90-80-90 #  
**Proteasome Endopeptidase Complex** D08-20-100-90-90 #  
**Serine Proteases** D08-20-100-90-100+  
**Cathepsin A** D08-20-100-90-100-10 #  
**Dipeptidyl Peptidase 4** D08-20-100-90-100-20 #  
**Serine Endopeptidases** D08-20-100-90-100-30+ #  
**Acrosin** D08-20-100-90-100-30-10 #  
**Cathepsin G** D08-20-100-90-100-30-20 #  
**Chymases** D08-20-100-90-100-30-30 #  
**Chymotrypsin** D08-20-100-90-100-30-40 #  
**Enteropeptidase** D08-20-100-90-100-30-50 #  
**Furin** D08-20-100-90-100-30-60 #  
**Granzymes** D08-20-100-90-100-30-70 #  
**High-Temperature Requirement A Serine Peptidase 1** D08-20-100-90-100-30-80 #  
**High-Temperature Requirement A Serine Peptidase 2** D08-20-100-90-100-30-90 #  
**Kallikreins** D08-20-100-90-100-30-100+ #  
**Plasma Kallikrein** D08-20-100-90-100-30-100-10 #  
**Prekallikrein** D08-20-100-90-100-30-100-20 #  
**Tissue Kallikreins** D08-20-100-90-100-30-100-30 #  
**前立腺特異抗原** D08-20-100-90-100-30-100-40 #  
**Lactoferrin** D08-20-100-90-100-30-110 #  
**Mannose-Binding Protein-Associated Serine Proteases** D08-20-100-90-100-30-120 #  
**Myeloblastin** D08-20-100-90-100-30-130 #  
**Pancreatic Elastase** D08-20-100-90-100-30-140+ #  
**Leukocyte Elastase** D08-20-100-90-100-30-140-10 #  
**Peptidase K** D08-20-100-90-100-30-150 #  
**Plasmin** D08-20-100-90-100-30-160+ #  
**Ocriplasmin** D08-20-100-90-100-30-160-10 #  
**Plasminogen Activators** D08-20-100-90-100-30-170+ #  
**Anistreplase** D08-20-100-90-100-30-170-10 #  
**Desmoteplase** D08-20-100-90-100-30-170-20 #  
**Monteplase** D08-20-100-90-100-30-170-30 #  
**Silteplase** D08-20-100-90-100-30-170-40 #  
**Pronase** D08-20-100-90-100-30-180 #  
**Proprotein Convertase 1** D08-20-100-90-100-30-190 #  
**Proprotein Convertase 2** D08-20-100-90-100-30-200 #  
**Proprotein Convertase 5** D08-20-100-90-100-30-210 #  
**Proprotein Convertase 9** D08-20-100-90-100-30-220 #

- \* Reelin Protein D08-20-100-90-100-30-230 #
- Sfericase D08-20-100-90-100-30-240 #
- Subtilisins D08-20-100-90-100-30-250+ #
  - Subtilisin D08-20-100-90-100-30-250-10 #
- Thrombin D08-20-100-90-100-30-260+ #
  - Rusalatide D08-20-100-90-100-30-260-10 #
  - Thrombin Alfa D08-20-100-90-100-30-260-20 #
- Tissue Plasminogen Activator D08-20-100-90-100-30-270+ #
  - Duteplase D08-20-100-90-100-30-270-10 #
  - Lanoteplase D08-20-100-90-100-30-270-20 #
  - Nateplase D08-20-100-90-100-30-270-30 #
  - Pamiteplase D08-20-100-90-100-30-270-40 #
  - Retepase D08-20-100-90-100-30-270-50 #
  - Tenecteplase D08-20-100-90-100-30-270-60 #
- Trypsin D08-20-100-90-100-30-280 #
- Tryptases D08-20-100-90-100-30-290 #
- U-Plasminogen Activator D08-20-100-90-100-30-300+ #
  - Nasaruplase D08-20-100-90-100-30-300-10 #
  - Saruplase D08-20-100-90-100-30-300-20 #
- Venombin A D08-20-100-90-100-30-310+ #
  - Ancrod D08-20-100-90-100-30-310-10 #
  - Batroxobin D08-20-100-90-100-30-310-20 #
- 活性化血液凝固第VII因子 D08-20-100-90-100-30-320+ #
  - Eptacog Alfa D08-20-100-90-100-30-320-10 #
- 活性化血液凝固第IX因子 D08-20-100-90-100-30-330 #
- 活性化血液凝固第X因子 D08-20-100-90-100-30-340+ #
  - \* Andexanet Alfa D08-20-100-90-100-30-340-10 #
- 活性化血液凝固第XI因子 D08-20-100-90-100-30-350 #
- 活性化血液凝固第XII因子 D08-20-100-90-100-30-360 #
- 補体因子B D08-20-100-90-100-30-370 #
- 補体因子D D08-20-100-90-100-30-380 #
- 補体因子I D08-20-100-90-100-30-390 #
- Serine-Type D-Ala-D-Ala Carboxypeptidase D08-20-100-90-100-40 #
- \* Tripeptidyl Peptidase I D08-20-100-90-100-50 #
- Serrapeptase D08-20-100-90-110 #
- \* ウイルスプロテアーゼ D08-20-100-90-120+ #
  - \* 3C Viral Proteases D08-20-100-90-120-10+ #
    - \* Coronavirus 3C Proteases D08-20-100-90-120-10-10 #
  - HIV Protease D08-20-100-90-120-20 #
  - \* Viral Papain-Like Proteases D08-20-100-90-120-30+ #
    - \* Coronavirus Papain-Like Proteases D08-20-100-90-120-30-10 #
- Protein-Arginine Deiminases D08-20-100-100+
  - \* Protein-Arginine Deiminase Type 1 D08-20-100-100-10
  - \* Protein-Arginine Deiminase Type 2 D08-20-100-100-20
  - \* Protein-Arginine Deiminase Type 3 D08-20-100-100-30
  - \* Protein-Arginine Deiminase Type 4 D08-20-100-100-40
  - \* Protein-Arginine Deiminase Type 6 D08-20-100-100-50
- Protein Deglycase DJ-1 D08-20-100-110 #
- Ureohydrolases D08-20-100-120+
  - Arginase D08-20-100-120-10
- 補体活性化酵素 D08-20-100-130+ #
  - 補体C1r D08-20-100-130-10 #
  - 補体C1s D08-20-100-130-20 #
  - 補体因子D D08-20-100-130-30 #
- 合成酵素 D08-20-110+
  - Carbon-Carbon Ligases D08-20-110-10+
    - Acetyl-CoA Carboxylase D08-20-110-10-10 #
    - Polyketide Synthases D08-20-110-10-20 #
    - Pyruvate Carboxylase D08-20-110-10-30

- Carbon-Nitrogen Ligases** D08-20-110-20+
  - Adenylosuccinate Synthase** D08-20-110-20-10
  - Amide Synthases** D08-20-110-20-20+
    - Aspartate-Ammonia Ligase** D08-20-110-20-20-10
    - Glutamate-Ammonia Ligase** D08-20-110-20-20-20
  - Argininosuccinate Synthase** D08-20-110-20-30
  - Carbamoyl-Phosphate Synthase (Ammonia)** D08-20-110-20-40
  - Carbon-Nitrogen Ligases with Glutamine as Amide-N-Donor** D08-20-110-20-50+
    - Carbamoyl-Phosphate Synthase (Glutamine-Hydrolyzing)** D08-20-110-20-50-10
  - Formate-Tetrahydrofolate Ligase** D08-20-110-20-60
  - Peptide Synthases** D08-20-110-20-70+
    - Glutamate-Cysteine Ligase** D08-20-110-20-70-10
    - Glutathione Synthase** D08-20-110-20-70-20
- Carbon-Oxygen Ligases** D08-20-110-30+
  - Amino Acyl-tRNA Synthetases** D08-20-110-30-10+
    - Alanine-tRNA Ligase** D08-20-110-30-10-10
    - Arginine-tRNA Ligase** D08-20-110-30-10-20
    - Aspartate-tRNA Ligase** D08-20-110-30-10-30
    - Glutamate-tRNA Ligase** D08-20-110-30-10-40
    - Glycine-tRNA Ligase** D08-20-110-30-10-50
    - Histidine-tRNA Ligase** D08-20-110-30-10-60
    - Isoleucine-tRNA Ligase** D08-20-110-30-10-70
    - Leucine-tRNA Ligase** D08-20-110-30-10-80
    - Lysine-tRNA Ligase** D08-20-110-30-10-90
    - Methionine-tRNA Ligase** D08-20-110-30-10-100
    - Phenylalanine-tRNA Ligase** D08-20-110-30-10-110
    - Serine-tRNA Ligase** D08-20-110-30-10-120
    - Threonine-tRNA Ligase** D08-20-110-30-10-130
    - Tryptophan-tRNA Ligase** D08-20-110-30-10-140
    - Tyrosine-tRNA Ligase** D08-20-110-30-10-150
    - Valine-tRNA Ligase** D08-20-110-30-10-160
- Carbon-Sulfur Ligases** D08-20-110-40+
  - Coenzyme A Ligases** D08-20-110-40-10+
    - Acetate-CoA Ligase** D08-20-110-40-10-10
    - Succinate-CoA Ligases** D08-20-110-40-10-20
- Polynucleotide Ligases** D08-20-110-50+
  - DNA Ligases** D08-20-110-50-10+ #
    - DNA Ligase (ATP)** D08-20-110-50-10-10 #
  - RNA Ligase (ATP)** D08-20-110-50-20
- Ubiquitin-Protein Ligase Complexes** D08-20-110-60+
  - Ubiquitin-Activating Enzymes** D08-20-110-60-10
  - Ubiquitin-Conjugating Enzymes** D08-20-110-60-20
  - Ubiquitin-Protein Ligase** D08-20-110-60-30+
    - Anaphase-Promoting Complex-Cyclosome** D08-20-110-60-30-10+ #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc1** D08-20-110-60-30-10-10 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc2** D08-20-110-60-30-10-20 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc3** D08-20-110-60-30-10-30 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc4** D08-20-110-60-30-10-40 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc5** D08-20-110-60-30-10-50 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc6** D08-20-110-60-30-10-60 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc7** D08-20-110-60-30-10-70 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc8** D08-20-110-60-30-10-80 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc10** D08-20-110-60-30-10-90 #
      - Anaphase-Promoting Complex-Cyclosome Subunit Apc11** D08-20-110-60-30-10-100 #
    - Cdc20 Proteins** D08-20-110-60-30-10-110 #
    - Cdh1 Proteins** D08-20-110-60-30-10-120 #
  - Autocrine Motility Factor Receptors** D08-20-110-60-30-20 #
    - c-cbl癌原遺伝子タンパク質** D08-20-110-60-30-30 #
    - c-mdm2癌原遺伝子タンパク質** D08-20-110-60-30-40 #

- Fanconi貧血相補群Lタンパク質 D08-20-110-60-30-50 #
- Mucosa-Associated Lymphoid Tissue Lymphoma Translocation 1 Protein D08-20-110-60-30-60 #
- Nedd4 Ubiquitin Protein Ligases D08-20-110-60-30-70 #
- Polycomb Repressive Complex 1 D08-20-110-60-30-80 #
- SKP Cullin F-Box Protein Ligases D08-20-110-60-30-90+
- Cullin Proteins D08-20-110-60-30-90-10 #
- F-Box-WD Repeat-Containing Protein 7 D08-20-110-60-30-90-20 #
- Tripartite Motif-Containing Protein 28 D08-20-110-60-30-100 #
- Von Hippel-Lindau腫瘍抑制タンパク質 D08-20-110-60-30-110 #
- アポトーシス阻害タンパク質 D08-20-110-60-30-120+ #
- Baculoviral IAP Repeat-Containing 3 Protein D08-20-110-60-30-120-10 #
- Neuronal Apoptosis-Inhibitory Protein D08-20-110-60-30-120-20 #
- X-Linked Inhibitor of Apoptosis Protein D08-20-110-60-30-120-30 #
- 腫瘍壊死因子アルファ誘導タンパク質3 D08-20-110-60-30-130 #
- 固定化酵素 D08-20-120 #
- 酸化還元酵素 D08-20-130+
- Alcohol Oxidoreductases D08-20-130-10+
- Carbohydrate Dehydrogenases D08-20-130-10-10+
- Fructuronate Reductase D08-20-130-10-10-10
- Galactose Dehydrogenases D08-20-130-10-10-20
- Glucose Dehydrogenases D08-20-130-10-10-30+
- Glucose 1-Dehydrogenase D08-20-130-10-10-30-10
- Glucose-6-Phosphate Dehydrogenase (NADP+) D08-20-130-10-10-40
- Phosphogluconate 2-Dehydrogenase D08-20-130-10-10-50
- Phosphoglycerate Dehydrogenase D08-20-130-10-10-60
- Sugar Alcohol Dehydrogenases D08-20-130-10-10-70+
- Aldo-Keto Reductases D08-20-130-10-10-70-10+ #
- Aldehyde Reductase D08-20-130-10-10-70-10-10 #
- Aldo-Keto Reductase Family 1 member B10 D08-20-130-10-10-70-10-20 #
- Aldo-Keto Reductase Family 1 Member C2 D08-20-130-10-10-70-10-30 #
- Aldo-Keto Reductase Family 1 Member C3 D08-20-130-10-10-70-10-40 #
- 20-Alpha-Hydroxysteroid Dehydrogenase D08-20-130-10-10-70-10-50 #
- Glycerolphosphate Dehydrogenase D08-20-130-10-10-70-20+
- Glycerol-3-Phosphate Dehydrogenase (NAD+) D08-20-130-10-10-70-20-10 #
- L-Gulonolactone Oxidase D08-20-130-10-10-70-30
- L-Iditol 2-Dehydrogenase D08-20-130-10-10-70-40
- Mannitol Dehydrogenases D08-20-130-10-10-70-50
- D-Xylulose Reductase D08-20-130-10-10-70-60 #
- UDP-Glucose 6-Dehydrogenase D08-20-130-10-10-80
- Choline Dehydrogenase D08-20-130-10-20
- Galactose Oxidase D08-20-130-10-30
- Glucose Oxidase D08-20-130-10-40
- Hydroxysteroid Dehydrogenases D08-20-130-10-50+
- 3-Hydroxysteroid Dehydrogenases D08-20-130-10-50-10+
- Cholesterol Oxidase D08-20-130-10-50-10-10
- 3-Alpha-Hydroxysteroid Dehydrogenase (B-Specific) D08-20-130-10-50-10-20 #
- 3Beta-Hydroxy-Delta-5-Steroid Dehydrogenase D08-20-130-10-50-10-30 #
- 11Beta-Hydroxysteroid Dehydrogenases D08-20-130-10-50-20+ #
- 11Beta-Hydroxysteroid Dehydrogenase Type 1 D08-20-130-10-50-20-10 #
- 11Beta-Hydroxysteroid Dehydrogenase Type 2 D08-20-130-10-50-20-20 #
- 17-Hydroxysteroid Dehydrogenases D08-20-130-10-50-30+
- Aldo-Keto Reductase Family 1 Member C3 D08-20-130-10-50-30-10 #
- 17Beta-Estradiol 17-Dehydrogenase D08-20-130-10-50-30-20
- Peroxisomal Multifunctional Protein-2 D08-20-130-10-50-30-30 #
- Lactate Dehydrogenases D08-20-130-10-60+
- Epsilon-Crystallins D08-20-130-10-60-10 #
- L-Lactate Dehydrogenase D08-20-130-10-60-20+ #
- \* Lactate Dehydrogenase 5 D08-20-130-10-60-20-10
- L-Lactate Dehydrogenase (Cytochrome) D08-20-130-10-60-30

- NAD (+) and NADP (+) Dependent Alcohol Oxidoreductases** D08-20-130-10-70+
- Acetoin Dehydrogenase D08-20-130-10-70-10
  - Alcohol Dehydrogenase D08-20-130-10-70-20
  - Aldo-Keto Reductases** D08-20-130-10-70-30+ #
    - Aldehyde Reductase D08-20-130-10-70-30-10 #
    - Aldo-Keto Reductase Family 1 member B10** D08-20-130-10-70-30-20 #
    - Aldo-Keto Reductase Family 1 Member C2** D08-20-130-10-70-30-30 #
    - Aldo-Keto Reductase Family 1 Member C3** D08-20-130-10-70-30-40 #
    - 20-Alpha-Hydroxysteroid Dehydrogenase** D08-20-130-10-70-30-50 #
  - Carbonyl Reductase (NADPH) D08-20-130-10-70-40
  - Glycerol-3-Phosphate Dehydrogenase (NAD+) D08-20-130-10-70-50 #
  - Homoserine Dehydrogenase D08-20-130-10-70-60+
    - Aspartokinase Homoserine Dehydrogenase D08-20-130-10-70-60-10 #
  - 3-Hydroxyacyl CoA Dehydrogenases** D08-20-130-10-70-70+
    - 3-Hydroxyacyl-CoA Dehydrogenase** D08-20-130-10-70-70-10+
      - Peroxisomal Bifunctional Enzyme D08-20-130-10-70-70-10-10 #
    - Hydroxymethylglutaryl CoA Reductases** D08-20-130-10-70-70-20+
      - NAD-Dependent Hydroxymethylglutaryl-CoA Reductases** D08-20-130-10-70-70-20-10
      - NADP-Dependent Hydroxymethylglutaryl-CoA-Reductases** D08-20-130-10-70-70-20-20
    - Long-Chain-3-Hydroxyacyl-CoA Dehydrogenase** D08-20-130-10-70-70-30+
      - Mitochondrial Trifunctional Protein** D08-20-130-10-70-70-30-10+ #
        - Mitochondrial Trifunctional Protein, Alpha Subunit** D08-20-130-10-70-70-30-10-10 #
    - Peroxisomal Multifunctional Protein-2** D08-20-130-10-70-70-40 #
  - 3-Hydroxybutyrate Dehydrogenase** D08-20-130-10-70-80
  - Hydroxyprostaglandin Dehydrogenases** D08-20-130-10-70-90+
    - Aldo-Keto Reductase Family 1 Member C3** D08-20-130-10-70-90-10 #
  - Hydroxypyruvate Reductase** D08-20-130-10-70-100
  - 3-Alpha-Hydroxysteroid Dehydrogenase (B-Specific)** D08-20-130-10-70-110 #
  - 3Beta-Hydroxy-Delta-5-Steroid Dehydrogenase** D08-20-130-10-70-120 #
  - 11Beta-Hydroxysteroid Dehydrogenases** D08-20-130-10-70-130+ #
    - 11Beta-Hydroxysteroid Dehydrogenase Type 1** D08-20-130-10-70-130-10 #
    - 11Beta-Hydroxysteroid Dehydrogenase Type 2** D08-20-130-10-70-130-20 #
  - 20-Hydroxysteroid Dehydrogenases** D08-20-130-10-70-140+
    - 3Alpha(or 20Beta)-Hydroxysteroid Dehydrogenase** D08-20-130-10-70-140-10
    - 20-Alpha-Hydroxysteroid Dehydrogenase** D08-20-130-10-70-140-20 #
  - IMP Dehydrogenase** D08-20-130-10-70-150
  - Isocitrate Dehydrogenase (NAD+)** D08-20-130-10-70-160
  - 3-Isopropylmalate Dehydrogenase** D08-20-130-10-70-170
  - Ketol-Acid Reductoisomerase** D08-20-130-10-70-180
  - L-Lactate Dehydrogenase** D08-20-130-10-70-190 #
  - Malate Dehydrogenase** D08-20-130-10-70-200
  - Malate Dehydrogenase (NADP+)** D08-20-130-10-70-210
  - 3-Oxoacyl-(Acyl-Carrier-Protein) Reductase** D08-20-130-10-70-220+
    - Fatty Acid Synthase** D08-20-130-10-70-220-10+ #
      - Fatty Acid Synthase, Type I** D08-20-130-10-70-220-10-10 #
      - Fatty Acid Synthase, Type II** D08-20-130-10-70-220-10-20 #
  - Short Chain Dehydrogenase-Reductases** D08-20-130-10-70-230+
    - WW Domain-Containing Oxidoreductase** D08-20-130-10-70-230-10 #
  - D-Xylulose Reductase** D08-20-130-10-70-240 #
  - Xanthine Dehydrogenase** D08-20-130-10-80
  - Xanthine Oxidase** D08-20-130-10-90
  - Arsenate Reductases** D08-20-130-20
  - L-Ascorbate Oxidase** D08-20-130-30
  - Ceruloplasmin** D08-20-130-40 #
  - CH-CH供与体作用群酸化還元酵素** D08-20-130-50+
    - Acyl-CoA Dehydrogenases** D08-20-130-50-10+
      - Acyl-CoA Dehydrogenase** D08-20-130-50-10-10 #
      - Acyl-CoA Oxidase** D08-20-130-50-10-20 #
    - Butyryl-CoA Dehydrogenase** D08-20-130-50-10-30 #

- Long-Chain Acyl-CoA Dehydrogenase D08-20-130-50-10-40 #  
 Cholestenone 5 Alpha-Reductase D08-20-130-50-20  
 Coproporphyrinogen Oxidase D08-20-130-50-30  
 Dihydrodipicolinate Reductase D08-20-130-50-40  
 \* Dihydroorotate Dehydrogenase D08-20-130-50-50  
 Dihydroorotate Oxidase D08-20-130-50-60  
 Dihydropyrimidine Dehydrogenase (NADP+) D08-20-130-50-70 #  
 Dihydrouracil Dehydrogenase (NAD+) D08-20-130-50-80  
 Enoyl-(Acyl-Carrier-Protein) Reductase (NADH) D08-20-130-50-90  
 Enoyl-(Acyl-Carrier Protein) Reductase (NADPH, B-Specific) D08-20-130-50-100  
 Glutaryl-CoA Dehydrogenase D08-20-130-50-110  
 Isovaleryl-CoA Dehydrogenase D08-20-130-50-120  
 15-Oxoprostaglandin 13-Reductase D08-20-130-50-130  
 3-Oxo-5Alpha-steroid 4-Dehydrogenase (Acceptor) D08-20-130-50-140  
 Prephenate Dehydrogenase D08-20-130-50-150 #  
 Protoporphyrinogen Oxidase D08-20-130-50-160 #  
 電子伝達複合体II D08-20-130-50-170+ #  
 Succinate Dehydrogenase D08-20-130-50-170-10 #  
 CH-NH供与体作用群酸化還元酵素 D08-20-130-60+  
 N-Demethylating Oxidoreductases D08-20-130-60-10+  
 AlkB Homolog 4, Lysine Demethylase D08-20-130-60-10-10 #  
 AlkB Homolog 5, RNA Demethylase D08-20-130-60-10-20 #  
 Alpha-Ketoglutarate-Dependent Dioxygenase FTO D08-20-130-60-10-30 #  
 Aminopyrine N-Demethylase D08-20-130-60-10-40  
 Cytochrome P-450 CYP2E1 D08-20-130-60-10-50 #  
 Cytochrome P-450 CYP3A D08-20-130-60-10-60+ #  
 Cytochrome P-450 CYP3A4 D08-20-130-60-10-60-10 #  
 6,7-Dihydropteridine Reductase D08-20-130-60-10-70  
 Dimethylglycine Dehydrogenase D08-20-130-60-10-80  
 Ethylmorphine-N-Demethylase D08-20-130-60-10-90  
 Histone Demethylases D08-20-130-60-10-100+  
 Jumonji Domain-Containing Histone Demethylases D08-20-130-60-10-100-10+ #  
 Retinoblastoma-Binding Protein 2 D08-20-130-60-10-100-10-10 #  
 Sarcosine Dehydrogenase D08-20-130-60-10-110  
 Sarcosine Oxidase D08-20-130-60-10-120 #  
 Dihydrofolate Reductase D08-20-130-60-20  
 FMN Reductase D08-20-130-60-30  
 Methylene tetrahydrofolate Dehydrogenase (NAD+) D08-20-130-60-40  
 Methylene tetrahydrofolate Dehydrogenase (NADP+) D08-20-130-60-50  
 Methylene tetrahydrofolate Reductase (NAD(P)H) D08-20-130-60-60 #  
 \* Mu-Crystallins D08-20-130-60-70 #  
 Proline Oxidase D08-20-130-60-80 #  
 Pyridoxal 5'-Phosphate Synthase D08-20-130-60-90  
 Pyrroline Carboxylate Reductases D08-20-130-60-100  
 1-Pyrroline-5-Carboxylate Dehydrogenase D08-20-130-60-110  
 Saccharopine Dehydrogenases D08-20-130-60-120  
 CH-NH2供与体作用群酸化還元酵素 D08-20-130-70+  
 Amine Oxidase (Copper-Containing) D08-20-130-70-10  
 Amino Acid Oxidoreductases D08-20-130-70-20+  
 Alanine Dehydrogenase D08-20-130-70-20-10  
 D-Amino-Acid Oxidase D08-20-130-70-20-20  
 L-Amino-Acid Oxidase D08-20-130-70-20-30  
 D-Aspartate Oxidase D08-20-130-70-20-40  
 Glutamate Dehydrogenase D08-20-130-70-20-50  
 Glutamate Dehydrogenase (NADP+) D08-20-130-70-20-60  
 Glutamate Synthase (NADH) D08-20-130-70-20-70 #  
 Glutamate Synthase (NADPH) D08-20-130-70-20-80 #  
 Glycine Decarboxylase Complex D08-20-130-70-20-90+ #  
 Glycine Dehydrogenase (Decarboxylating) D08-20-130-70-20-90-10 #



**Glycine Dehydrogenase** D08-20-130-70-20-100  
**Leucine Dehydrogenase** D08-20-130-70-20-110  
**Nitric Oxide Synthase** D08-20-130-70-20-120+  
     **Nitric Oxide Synthase Type I** D08-20-130-70-20-120-10  
     **Nitric Oxide Synthase Type II** D08-20-130-70-20-120-20 #  
     **Nitric Oxide Synthase Type III** D08-20-130-70-20-120-30  
**Proline Oxidase** D08-20-130-70-20-130 #  
**Protein-Lysine 6-Oxidase** D08-20-130-70-20-140  
**Valine Dehydrogenase (NADP+)** D08-20-130-70-20-150  
**Monoamine Oxidase** D08-20-130-70-30+  
     **Benzylamine Oxidase** D08-20-130-70-30-10  
**O-Demethylating Oxidoreductases** D08-20-130-80+  
     **Nitroaniline O-Demethylase** D08-20-130-80-10  
**Factor-Independent Urate Hydroxylase** D08-20-130-90+  
     **Pegloticase** D08-20-130-90-10 #  
     **Rasburicase** D08-20-130-90-20 #  
**Ferredoxin Hydrogenase** D08-20-130-100  
**Laccase** D08-20-130-110  
**Luciferases** D08-20-130-120+ #  
     **Bacterial Luciferases** D08-20-130-120-10 #  
     **Firefly Luciferases** D08-20-130-120-20 #  
     **Renilla Luciferases** D08-20-130-120-30 #  
**Methionine Sulfoxide Reductases** D08-20-130-130 #  
**5,10-Methylenetetrahydrofolate Reductase (FADH2)** D08-20-130-140  
**NADH, NADPH Oxidoreductases** D08-20-130-150+  
     **Cytochrome Reductases** D08-20-130-150-10+  
         **Cytochrome-B(5) Reductase** D08-20-130-150-10-10 #  
         **NADPH-Hemoprotein Reductase** D08-20-130-150-10-20  
     **NADH Tetrazolium Reductase** D08-20-130-150-20  
     **NADP Transhydrogenases** D08-20-130-150-30+  
         **NAD(P)+ Transhydrogenase (AB-specific)** D08-20-130-150-30-10  
         **NAD(P)+ Transhydrogenase (B-Specific)** D08-20-130-150-30-20 #  
     **NADPH Dehydrogenase** D08-20-130-150-40  
     **NADPH Oxidases** D08-20-130-150-50+ #  
         **Dual Oxidases** D08-20-130-150-50-10 #  
         **NADPH Oxidase 1** D08-20-130-150-50-20 #  
         **NADPH Oxidase 2** D08-20-130-150-50-30 #  
         **NADPH Oxidase 4** D08-20-130-150-50-40 #  
         **NADPH Oxidase 5** D08-20-130-150-50-50 #  
     **Quinone Reductases** D08-20-130-150-60+  
         **NAD(P)H Dehydrogenase (Quinone)** D08-20-130-150-60-10+  
         **Zeta-Crystallins** D08-20-130-150-60-10-10 #  
**アポトーシス誘導因子** D08-20-130-150-70 #  
**電子伝達複合体I** D08-20-130-150-80+ #  
     **NADH Dehydrogenase** D08-20-130-150-80-10 #  
**Nitrogenase** D08-20-130-160+  
     **Dinitrogenase Reductase** D08-20-130-160-10  
     **Molybdoferredoxin** D08-20-130-160-20 #  
**Nitroreductases** D08-20-130-170+  
     **GMP Reductase** D08-20-130-170-10  
     **Nitrate Reductases** D08-20-130-170-20+  
         **Nitrate Reductase** D08-20-130-170-20-10  
         **Nitrate Reductase (NAD(P)H)** D08-20-130-170-20-20 #  
         **Nitrate Reductase (NADH)** D08-20-130-170-20-30 #  
         **Nitrate Reductase (NADPH)** D08-20-130-170-20-40 #  
     **Nitrite Reductases** D08-20-130-170-30+  
         **Ferredoxin-Nitrite Reductase** D08-20-130-170-30-10 #  
         **Nitrite Reductase (NAD(P)H)** D08-20-130-170-30-20  
**Oxygenases** D08-20-130-180+

- Dioxygenases** D08-20-130-180-10+
- AlkB Enzymes** D08-20-130-180-10-10+ #
    - AlkB Homolog 1, Histone H2a Dioxygenase** D08-20-130-180-10-10-10 #
    - AlkB Homolog 2, Alpha-Ketoglutarate-Dependent Dioxygenase** D08-20-130-180-10-10-20 #
    - AlkB Homolog 3, Alpha-Ketoglutarate-Dependent Dioxygenase** D08-20-130-180-10-10-30 #
    - AlkB Homolog 4, Lysine Demethylase** D08-20-130-180-10-10-40 #
    - AlkB Homolog 5, RNA Demethylase** D08-20-130-180-10-10-50 #
    - AlkB Homolog 8, tRNA Methyltransferase** D08-20-130-180-10-10-60 #
    - Alpha-Ketoglutarate-Dependent Dioxygenase FTO** D08-20-130-180-10-10-70 #
  - Catechol 1,2-Dioxygenase** D08-20-130-180-10-20
  - Catechol 2,3-Dioxygenase** D08-20-130-180-10-30
  - Cysteine Dioxygenase** D08-20-130-180-10-40
  - Homogentisate 1,2-Dioxygenase** D08-20-130-180-10-50
  - 3-Hydroxyanthranilate 3,4-Dioxygenase** D08-20-130-180-10-60
  - 4-Hydroxyphenylpyruvate Dioxygenase** D08-20-130-180-10-70
  - Indoleamine 2,3-Dioxygenase** D08-20-130-180-10-80
  - Jumonji Domain-Containing Histone Demethylases** D08-20-130-180-10-90+ #
    - Retinoblastoma-Binding Protein 2** D08-20-130-180-10-90-10 #
  - Lipoxygenases** D08-20-130-180-10-100+ #
    - Arachidonate Lipoxygenases** D08-20-130-180-10-100-10+ #
      - Arachidonate 5-Lipoxygenase** D08-20-130-180-10-100-10-10 #
      - Arachidonate 12-Lipoxygenase** D08-20-130-180-10-100-10-20 #
      - Arachidonate 15-Lipoxygenase** D08-20-130-180-10-100-10-30 #
    - Lipoxygenase** D08-20-130-180-10-100-20 #
  - Prolyl Hydroxylases** D08-20-130-180-10-110+ #
    - Hypoxia-Inducible Factor-Proline Dioxygenases** D08-20-130-180-10-110-10 #
    - Procollagen-Proline Dioxygenase** D08-20-130-180-10-110-20 #
  - Protocatechuate 3,4-Dioxygenase** D08-20-130-180-10-120
  - Tryptophan 2,3-Dioxygenase** D08-20-130-180-10-130
  - Inositol Oxygenase** D08-20-130-180-20 #
  - Mixed Function Oxygenases** D08-20-130-180-30+
    - Benzoate 4-Monooxygenase** D08-20-130-180-30-10
    - Catechol Oxidase** D08-20-130-180-30-20+
      - Monophenol Monooxygenase** D08-20-130-180-30-20-10
    - trans-Cinnamate 4-Monooxygenase** D08-20-130-180-30-30 #
    - Cytochrome P-450** D08-20-130-180-30-40+ #
      - Aryl Hydrocarbon Hydroxylases** D08-20-130-180-30-40-10+ #
        - 7-Alkoxy coumarin O-Dealkylase** D08-20-130-180-30-40-10-10
        - Aniline Hydroxylase** D08-20-130-180-30-40-10-20 #
        - Benzopyrene Hydroxylase** D08-20-130-180-30-40-10-30 #
        - Cytochrome P-450 CYP1A1** D08-20-130-180-30-40-10-40 #
        - Cytochrome P-450 CYP1A2** D08-20-130-180-30-40-10-50 #
        - Cytochrome P-450 CYP1B1** D08-20-130-180-30-40-10-60 #
        - Cytochrome P-450 CYP2B1** D08-20-130-180-30-40-10-70 #
        - Cytochrome P-450 CYP2B6** D08-20-130-180-30-40-10-80 #
        - Cytochrome P-450 CYP2C8** D08-20-130-180-30-40-10-90 #
        - Cytochrome P-450 CYP2D6** D08-20-130-180-30-40-10-100 #
      - Camphor 5-Monooxygenase** D08-20-130-180-30-40-20 #
      - \* **Cytochrome P-450 CYP2J2** D08-20-130-180-30-40-30 #
      - Cytochrome P450 Family 1** D08-20-130-180-30-40-40+ #
        - Cytochrome P-450 CYP1A1** D08-20-130-180-30-40-40-10 #
        - Cytochrome P-450 CYP1A2** D08-20-130-180-30-40-40-20 #
        - Cytochrome P-450 CYP1B1** D08-20-130-180-30-40-40-30 #
      - Cytochrome P450 Family 2** D08-20-130-180-30-40-50+ #
        - Cytochrome P-450 CYP2A6** D08-20-130-180-30-40-50-10 #
        - Cytochrome P-450 CYP2B1** D08-20-130-180-30-40-50-20 #
        - Cytochrome P-450 CYP2B6** D08-20-130-180-30-40-50-30 #
        - Cytochrome P-450 CYP2C8** D08-20-130-180-30-40-50-40 #
        - Cytochrome P-450 CYP2D6** D08-20-130-180-30-40-50-50 #

Cytochrome P-450 CYP2E1 D08-20-130-180-30-40-50-60 #  
 Limonene Hydroxylases D08-20-130-180-30-40-50-70+ #  
     Cytochrome P-450 CYP2C9 D08-20-130-180-30-40-50-70-10 #  
     Cytochrome P-450 CYP2C19 D08-20-130-180-30-40-50-70-20 #  
 Cytochrome P450 Family 3 D08-20-130-180-30-40-60+ #  
     Cytochrome P-450 CYP3A D08-20-130-180-30-40-60-10+ #  
     Cytochrome P-450 CYP3A4 D08-20-130-180-30-40-60-10-10 #  
 Cytochrome P450 Family 4 D08-20-130-180-30-40-70+ #  
     Cytochrome P-450 CYP4A D08-20-130-180-30-40-70-10 #  
 Cytochrome P450 Family 6 D08-20-130-180-30-40-80 #  
 Cytochrome P450 Family 7 D08-20-130-180-30-40-90+ #  
     Cholesterol 7 Alpha-Monooxygenase D08-20-130-180-30-40-90-10 #  
 Cytochrome P450 Family 8 D08-20-130-180-30-40-100+ #  
     Steroid 12-Alpha-Hydroxylase D08-20-130-180-30-40-100-10 #  
 Cytochrome P450 Family 11 D08-20-130-180-30-40-110+ #  
     Cholesterol Monooxygenase (Side-Chain-Cleaving) D08-20-130-180-30-40-110-10 #  
     Cytochrome P-450 CYP11B2 D08-20-130-180-30-40-110-20 #  
     Steroid 11-Beta-Monooxygenase D08-20-130-180-30-40-110-30 #  
 Cytochrome P450 Family 12 D08-20-130-180-30-40-120 #  
 Cytochrome P450 Family 17 D08-20-130-180-30-40-130+ #  
     Steroid 17-Alpha-Monooxygenase D08-20-130-180-30-40-130-10 #  
 Cytochrome P450 Family 19 D08-20-130-180-30-40-140+ #  
     Aromatase D08-20-130-180-30-40-140-10 #  
 Cytochrome P450 Family 21 D08-20-130-180-30-40-150+ #  
     Steroid 21-Monooxygenase D08-20-130-180-30-40-150-10 #  
 Cytochrome P450 Family 24 D08-20-130-180-30-40-160+ #  
     Vitamin D3 24-Hydroxylase D08-20-130-180-30-40-160-10 #  
 Cytochrome P450 Family 26 D08-20-130-180-30-40-170+ #  
     Retinoic Acid 4-Hydroxylase D08-20-130-180-30-40-170-10 #  
 Cytochrome P450 Family 27 D08-20-130-180-30-40-180+ #  
     Cholestanetriol 26-Monooxygenase D08-20-130-180-30-40-180-10 #  
     25-Hydroxyvitamin D3 1-Alpha-Hydroxylase D08-20-130-180-30-40-180-20 #  
 Cytochrome P450 Family 46 D08-20-130-180-30-40-190+ #  
     Cholesterol 24-Hydroxylase D08-20-130-180-30-40-190-10 #  
 Cytochrome P450 Family 51 D08-20-130-180-30-40-200+ #  
     Sterol 14-Demethylase D08-20-130-180-30-40-200-10 #  
 Steroid Hydroxylases D08-20-130-180-30-40-210+ #  
     Aromatase D08-20-130-180-30-40-210-10 #  
     Cholestanetriol 26-Monooxygenase D08-20-130-180-30-40-210-20 #  
     Cholesterol 24-Hydroxylase D08-20-130-180-30-40-210-30 #  
     Cholesterol Monooxygenase (Side-Chain-Cleaving) D08-20-130-180-30-40-210-40 #  
     Cholesterol 7 Alpha-Monooxygenase D08-20-130-180-30-40-210-50 #  
     Cytochrome P-450 CYP11B2 D08-20-130-180-30-40-210-60 #  
     25-Hydroxyvitamin D3 1-Alpha-Hydroxylase D08-20-130-180-30-40-210-70 #  
     Steroid 12-Alpha-Hydroxylase D08-20-130-180-30-40-210-80 #  
     Steroid 16-Alpha-Hydroxylase D08-20-130-180-30-40-210-90 #  
     Steroid 11-Beta-Monooxygenase D08-20-130-180-30-40-210-100 #  
     Steroid 17-Alpha-Monooxygenase D08-20-130-180-30-40-210-110 #  
     Steroid 21-Monooxygenase D08-20-130-180-30-40-210-120 #  
     Sterol 14-Demethylase D08-20-130-180-30-40-210-130 #  
 Dopamine Beta-Monooxygenase D08-20-130-180-30-50  
 Fatty Acid Desaturases D08-20-130-180-30-60+  
     Beta-Carotene 15,15'-Monooxygenase D08-20-130-180-30-60-10  
 \* Delta-5 Fatty Acid Desaturase D08-20-130-180-30-60-20  
     Linoleoyl-CoA Desaturase D08-20-130-180-30-60-30  
     Stearoyl-CoA 9-Desaturase D08-20-130-180-30-60-40  
 Gamma-Butyrobetaine Dioxygenase D08-20-130-180-30-70  
 Heme Oxygenase (Biliverdin-Producing) D08-20-130-180-30-80+  
     Heme Oxygenase-1 D08-20-130-180-30-80-10

- 4-Hydroxybenzoate 3-Monooxygenase** D08-20-130-180-30-90  
**Kynurenine 3-Monooxygenase** D08-20-130-180-30-100  
**Phenylalanine 4-Monooxygenase** D08-20-130-180-30-110  
**Procollagen-Lysine 5-Dioxygenase** D08-20-130-180-30-120  
**Prolyl Hydroxylases** D08-20-130-180-30-130+ #  
     **Hypoxia-Inducible Factor-Proline Dioxygenases** D08-20-130-180-30-130-10 #  
     **Procollagen-Proline Dioxygenase** D08-20-130-180-30-130-20 #  
**Prostaglandin-Endoperoxide Synthases** D08-20-130-180-30-140 #  
**Squalene Monooxygenase** D08-20-130-180-30-150  
**Tryptophan 5-Monooxygenase** D08-20-130-180-30-160  
**Tyrosine 3-Monooxygenase** D08-20-130-180-30-170 #  
**Vitamin K Epoxidase** D08-20-130-180-30-180  
**Peroxidases** D08-20-130-190+  
     **Ascorbate Peroxidases** D08-20-130-190-10  
     **Catalase** D08-20-130-190-20 #  
     **Chloride Peroxidase** D08-20-130-190-30  
     **Cytochrome-c Peroxidase** D08-20-130-190-40  
     **Eosinophil Peroxidase** D08-20-130-190-50 #  
     **Glutathione Peroxidase** D08-20-130-190-60  
     **Horseradish Peroxidase** D08-20-130-190-70+  
         **Wheat Germ Agglutinin-Horseradish Peroxidase Conjugate** D08-20-130-190-70-10 #  
     **Iodide Peroxidase** D08-20-130-190-80  
     **Lactoperoxidase** D08-20-130-190-90  
     **Peroxidase** D08-20-130-190-100  
     **Peroxiredoxins** D08-20-130-190-110+  
         **Peroxiredoxin III** D08-20-130-190-110-10 #  
         **Peroxiredoxin VI** D08-20-130-190-110-20 #  
     \* **Phospholipid-Hydroperoxide Glutathione Peroxidase** D08-20-130-190-120  
     \* **Sestrins** D08-20-130-190-130  
**Plastoquinol-Plastocyanin Reductase** D08-20-130-200 #  
**Ribonucleotide Reductases** D08-20-130-210+  
     **Ribonucleoside-Diphosphate Reductase** D08-20-130-210-10  
**Succinate Cytochrome c Oxidoreductase** D08-20-130-220+ #  
     **電子伝達複合体II** D08-20-130-220-10+ #  
         **Succinate Dehydrogenase** D08-20-130-220-10-10 #  
     **電子伝達複合体III** D08-20-130-220-20 #  
**Superoxide Dismutase** D08-20-130-230+ #  
     **Sudismase** D08-20-130-230-10 #  
     **Superoxide Dismutase-1** D08-20-130-230-20  
**アルデヒド基またはオキシ基供与体作用群酸化還元酵素** D08-20-130-240+  
     **Aldehyde Oxidoreductases** D08-20-130-240-10+  
         **Aldehyde Dehydrogenase** D08-20-130-240-10-10+  
             \* **Aldehyde Dehydrogenase 1 Family** D08-20-130-240-10-10-10  
                 **Mitochondrial Aldehyde Dehydrogenase** D08-20-130-240-10-10-20 #  
                 **Omega-Crystallins** D08-20-130-240-10-10-30 #  
                 **Retinal Dehydrogenase** D08-20-130-240-10-10-40 #  
     **Aldehyde Oxidase** D08-20-130-240-10-20  
     **L-Aminoacidate-Semialdehyde Dehydrogenase** D08-20-130-240-10-30  
     **Aminomuconate-Semialdehyde Dehydrogenase** D08-20-130-240-10-40  
     **Aspartate-Semialdehyde Dehydrogenase** D08-20-130-240-10-50  
     **Benzaldehyde Dehydrogenase (NADP+)** D08-20-130-240-10-60  
     **Betaine-Aldehyde Dehydrogenase** D08-20-130-240-10-70  
     **Glutamate-5-Semialdehyde Dehydrogenase** D08-20-130-240-10-80  
     **Glyceraldehyde-3-Phosphate Dehydrogenases** D08-20-130-240-10-90+  
         **Glyceraldehyde-3-Phosphate Dehydrogenase (NADP+)** D08-20-130-240-10-90-10  
         **Glyceraldehyde-3-Phosphate Dehydrogenase (NADP+)(Phosphorylating)** D08-20-130-240-10-90-20  
         **Glyceraldehyde-3-Phosphate Dehydrogenase (Phosphorylating)** D08-20-130-240-10-90-30  
     **Glycolaldehyde Dehydrogenase** D08-20-130-240-10-100  
     **Malonate-Semialdehyde Dehydrogenase (Acetylating)** D08-20-130-240-10-110

- Methylmalonate-Semialdehyde Dehydrogenase (Acylating)** D08-20-130-240-10-120  
**Succinate-Semialdehyde Dehydrogenase** D08-20-130-240-10-130  
**Succinate-Semialdehyde Dehydrogenase (NADP+)** D08-20-130-240-10-140  
**Formate Dehydrogenases** D08-20-130-240-20  
**Ketone Oxidoreductases** D08-20-130-240-30+  
     **Ketoglutarate Dehydrogenase Complex** D08-20-130-240-30-10+ #  
         **Dihydrolipoyl Dehydrogenase** D08-20-130-240-30-10-10 #  
     **3-Methyl-2-Oxobutanoate Dehydrogenase (2-Methylpropanoyl-Transferring)** D08-20-130-240-30-20  
     **2-Oxoisovalerate Dehydrogenase (Acylating)** D08-20-130-240-30-30  
     **Pyruvate Dehydrogenase (Acetyl-Transferring)** D08-20-130-240-30-40 #  
     **Pyruvate Oxidase** D08-20-130-240-30-50  
     **Pyruvate Synthase** D08-20-130-240-30-60  
**含硫化合物作用群酸化還元酵素** D08-20-130-250+  
     **Dihydrolipoyl Dehydrogenase** D08-20-130-250-10 #  
     **Ferredoxin-NADP(+)-Reductase** D08-20-130-250-20  
     **Glutaredoxins** D08-20-130-250-30  
     **Glutathione-Disulfide Reductase** D08-20-130-250-40  
     **Hydrogensulfite Reductase** D08-20-130-250-50  
     **Protein-Disulfide Reductase (Glutathione)** D08-20-130-250-60  
     **Sulfite Dehydrogenase** D08-20-130-250-70  
     **Sulfite Oxidase** D08-20-130-250-80  
     **Sulfite Reductase (Ferredoxin)** D08-20-130-250-90  
     **Sulfite Reductase (NADPH)** D08-20-130-250-100  
     **Thioredoxin-Disulfide Reductase** D08-20-130-250-110+ #  
         **Thioredoxin Reductase 1** D08-20-130-250-110-10  
         **Thioredoxin Reductase 2** D08-20-130-250-110-20  
**電子伝達複合体IV** D08-20-130-260 #  
**触媒DNA** D08-20-140 #  
**多機能酵素** D08-20-150+  
     **Acetyl-CoA Carboxylase** D08-20-150-10 #  
     **N-Acetyllactosamine Synthase** D08-20-150-20 #  
     **Aspartate Carbamoyltransferase** D08-20-150-30 #  
     **Aspartokinase Homoserine Dehydrogenase** D08-20-150-40 #  
     **Cyclin-Dependent Kinase 9** D08-20-150-50 #  
     **Dual-Specificity Phosphatases** D08-20-150-60+ #  
         **cdc25 Phosphatases** D08-20-150-60-10 #  
         **Dual Specificity Phosphatase 1** D08-20-150-60-20 #  
         **Dual Specificity Phosphatase 2** D08-20-150-60-30 #  
         **Dual Specificity Phosphatase 3** D08-20-150-60-40 #  
         **Dual Specificity Phosphatase 6** D08-20-150-60-50 #  
     **Fatty Acid Synthase, Type I** D08-20-150-70 #  
     **Glycosylceramidase** D08-20-150-80 #  
     **Mitochondrial Trifunctional Protein** D08-20-150-90+ #  
         **Mitochondrial Trifunctional Protein, Alpha Subunit** D08-20-150-90-10 #  
         **Mitochondrial Trifunctional Protein, Beta Subunit** D08-20-150-90-20 #  
     **Peroxisredoxin VI** D08-20-150-100 #  
     **Peroxisomal Bifunctional Enzyme** D08-20-150-110 #  
     **Peroxisomal Multifunctional Protein-2** D08-20-150-120 #  
     **6-Phosphofructo-2-kinase** D08-20-150-130 #  
**多酵素複合体** D08-20-160+ #  
     **Anthranilate Phosphoribosyltransferase** D08-20-160-10 #  
     **Anthranilate Synthase** D08-20-160-20 #  
     **Fatty Acid Synthase, Type II** D08-20-160-30 #  
     **Glycine Decarboxylase Complex** D08-20-160-40+ #  
         **Aminomethyltransferase** D08-20-160-40-10 #  
         **Dihydrolipoyl Dehydrogenase** D08-20-160-40-20 #  
         **Glycine Decarboxylase Complex H-Protein** D08-20-160-40-30 #  
         **Glycine Dehydrogenase (Decarboxylating)** D08-20-160-40-40 #  
     **Ketoglutarate Dehydrogenase Complex** D08-20-160-50+ #

- Dihydrolipoyl Dehydrogenase D08-20-160-50-10 #
- Mi-2 Nucleosome Remodeling and Deacetylase Complex D08-20-160-60+ #
- Histone Deacetylase 1 D08-20-160-60-10 #
- Histone Deacetylase 2 D08-20-160-60-20 #
- Retinoblastoma-Binding Protein 4 D08-20-160-60-30 #
- Retinoblastoma-Binding Protein 7 D08-20-160-60-40 #
- Phosphoenolpyruvate Sugar Phosphotransferase System D08-20-160-70 #
- Polyketide Synthases D08-20-160-80 #
- Prostaglandin-Endoperoxide Synthases D08-20-160-90+ #
- Cyclooxygenase 1 D08-20-160-90-10
- Cyclooxygenase 2 D08-20-160-90-20
- Proteasome Endopeptidase Complex D08-20-160-100 #
- Pyruvate Dehydrogenase Complex D08-20-160-110+ #
- Dihydrolipoyl Dehydrogenase D08-20-160-110-10 #
- Dihydrolipoyllysine-Residue Acetyltransferase D08-20-160-110-20 #
- Pyruvate Dehydrogenase (Acetyl-Transferring) D08-20-160-110-30 #
- Sin3 Histone Deacetylase and Corepressor Complex D08-20-160-120+ #
- Histone Deacetylase 1 D08-20-160-120-10 #
- Histone Deacetylase 2 D08-20-160-120-20 #
- Retinoblastoma-Binding Protein 4 D08-20-160-120-30 #
- Retinoblastoma-Binding Protein 7 D08-20-160-120-40 #
- Sucrase-Isomaltase Complex D08-20-160-130 #
- Tryptophan Synthase D08-20-160-140 #
- \* Viral Replicase Complex Proteins D08-20-160-150 #
- エクソソーム多酵素リボヌクレアーゼ複合体 D08-20-160-160 #
- 光合成反応中心複合体タンパク質 D08-20-160-170+ #
- Cytochrome b6f Complex D08-20-160-170-10+ #
- Cytochromes b6 D08-20-160-170-10-10 #
- Cytochromes f D08-20-160-170-10-20 #
- Plastoquinol-Plastocyanin Reductase D08-20-160-170-10-30 #
- Photosystem I Protein Complex D08-20-160-170-20 #
- Photosystem II Protein Complex D08-20-160-170-30 #
- 集光性タンパク質複合体 D08-20-160-170-40+ #
- Chlorophyll-Binding Proteins D08-20-160-170-40-10 #
- フィコビリソーム D08-20-160-170-40-20+ #
- Phycobiliproteins D08-20-160-170-40-20-10+ #
- Phycocyanin D08-20-160-170-40-20-10-10 #
- Phycocerythrin D08-20-160-170-40-20-10-20 #
- 電子伝達系複合体タンパク質 D08-20-160-180+ #
- Mitochondrial Proton-Translocating ATPases D08-20-160-180-10 #
- Succinate Cytochrome c Oxidoreductase D08-20-160-180-20+ #
- 電子伝達複合体II D08-20-160-180-20-10+ #
- Succinate Dehydrogenase D08-20-160-180-20-10-10 #
- 電子伝達複合体III D08-20-160-180-20-20 #
- 電子伝達複合体IV D08-20-160-180-30 #
- 電子伝達フラビタンパク質 D08-20-160-180-40+ #
- 電子伝達複合体I D08-20-160-180-40-10 #
- 電子伝達複合体II D08-20-160-180-40-20+ #
- Succinate Dehydrogenase D08-20-160-180-40-20-10 #
- 転移酵素 D08-20-170+
- Acyltransferases D08-20-170-10+
- Acetyl-CoA C-Acyltransferase D08-20-170-10-10+
- Mitochondrial Trifunctional Protein D08-20-170-10-10-10+ #
- Mitochondrial Trifunctional Protein, Beta Subunit D08-20-170-10-10-10-10 #
- Acyltransferases D08-20-170-10-20+
- Acetyl-CoA C-Acetyltransferase D08-20-170-10-20-10
- Acyl-Carrier Protein S-Acetyltransferase D08-20-170-10-20-20+
- Fatty Acid Synthase D08-20-170-10-20-20-10+ #
- Fatty Acid Synthase, Type I D08-20-170-10-20-20-10-10 #

**Fatty Acid Synthase, Type II** D08-20-170-10-20-20-10-20 #  
**Amino Acid N-Acetyltransferase** D08-20-170-10-20-30  
**Arylalkylamine-N-Acetyltransferase** D08-20-170-10-20-40  
**Arylamine N-Acetyltransferase** D08-20-170-10-20-50  
**Carnitine O-Acetyltransferase** D08-20-170-10-20-60 #  
**Chloramphenicol O-Acetyltransferase** D08-20-170-10-20-70  
**Choline O-Acetyltransferase** D08-20-170-10-20-80  
**Dihydrolipoyllysine-Residue Acetyltransferase** D08-20-170-10-20-90 #  
 \* **Fatty Acid Elongases** D08-20-170-10-20-100  
**Glucosamine 6-Phosphate N-Acetyltransferase** D08-20-170-10-20-110  
**Lysine Acetyltransferases** D08-20-170-10-20-120+  
     **Histone Acetyltransferases** D08-20-170-10-20-120-10+  
         **CLOCK Proteins** D08-20-170-10-20-120-10-10 #  
         **Lysine Acetyltransferase 5** D08-20-170-10-20-120-10-20  
         **p300-CBP転写因子** D08-20-170-10-20-120-10-30+ #  
             **CREB-Binding Protein** D08-20-170-10-20-120-10-30-10 #  
             **E1A-Associated p300 Protein** D08-20-170-10-20-120-10-30-20 #  
         **N-Terminal Acetyltransferase D** D08-20-170-10-20-120-10-40 #  
         **核内受容体コアクチペーター1** D08-20-170-10-20-120-10-50 #  
         **核内受容体コアクチペーター3** D08-20-170-10-20-120-10-60 #  
**Phosphate Acetyltransferase** D08-20-170-10-20-130  
**Serine O-Acetyltransferase** D08-20-170-10-20-140  
**N-Terminal Acetyltransferases** D08-20-170-10-20-150+  
     **N-Terminal Acetyltransferase A** D08-20-170-10-20-150-10  
     **N-Terminal Acetyltransferase B** D08-20-170-10-20-150-20  
     **N-Terminal Acetyltransferase C** D08-20-170-10-20-150-30  
     **N-Terminal Acetyltransferase D** D08-20-170-10-20-150-40 #  
     **N-Terminal Acetyltransferase E** D08-20-170-10-20-150-50  
     **N-Terminal Acetyltransferase F** D08-20-170-10-20-150-60  
**Acyl-Carrier Protein S-Malonyltransferase** D08-20-170-10-30+  
     **Fatty Acid Synthase** D08-20-170-10-30-10+ #  
         **Fatty Acid Synthase, Type I** D08-20-170-10-30-10-10 #  
         **Fatty Acid Synthase, Type II** D08-20-170-10-30-10-20 #  
**1-Acylglycerol-3-Phosphate O-Acyltransferase** D08-20-170-10-40  
**1-Acylglycerophosphocholine O-Acyltransferase** D08-20-170-10-50  
**Aminoacyltransferases** D08-20-170-10-60+  
     **Gamma-Glutamylcyclotransferase** D08-20-170-10-60-10  
     **Gamma-Glutamyltransferase** D08-20-170-10-60-20  
     **Peptidyl Transferases** D08-20-170-10-60-30  
     **Transglutaminases** D08-20-170-10-60-40+  
         \* **Transglutaminase 2** D08-20-170-10-60-40-10  
             **血液凝固第XIIIa因子** D08-20-170-10-60-40-20 #  
**5-Aminolevulinic Acid Synthase** D08-20-170-10-70  
**ATP Citrate (pro-S)-Lyase** D08-20-170-10-80  
**Carnitine Acyltransferases** D08-20-170-10-90+  
     **Carnitine O-Acetyltransferase** D08-20-170-10-90-10 #  
     **Carnitine O-Palmitoyltransferase** D08-20-170-10-90-20  
**Citrate (si)-Synthase** D08-20-170-10-100  
**Diacylglycerol O-Acyltransferase** D08-20-170-10-110  
**Glycerol-3-Phosphate O-Acyltransferase** D08-20-170-10-120  
**Homoserine O-Succinyltransferase** D08-20-170-10-130  
**Hydroxymethylglutaryl-CoA Synthase** D08-20-170-10-140  
**2-Isopropylmalate Synthase** D08-20-170-10-150  
**Malate Synthase** D08-20-170-10-160  
**3-Oxoacyl-(Acyl-Carrier-Protein) Synthase** D08-20-170-10-170  
**Phosphatidylcholine-Sterol O-Acyltransferase** D08-20-170-10-180  
**Retinol O-Fatty-Acyltransferase** D08-20-170-10-190  
**Serine C-Palmitoyltransferase** D08-20-170-10-200  
**Sphingosine N-Acyltransferase** D08-20-170-10-210

- Sterol O-Acyltransferase D08-20-170-10-220
- Aldehyde-Ketone Transferases D08-20-170-20+
- Acetolactate Synthase D08-20-170-20-10 #
- Transaldolase D08-20-170-20-20
- Transketolase D08-20-170-20-30
- Alkyltransferases and Aryltransferases D08-20-170-30+
- Cysteine Synthase D08-20-170-30-10
- 3-Deoxy-7-Phosphoheptulonate Synthase D08-20-170-30-20
- Dihydropteroate Synthase D08-20-170-30-30
- Dimethylallyltranstransferase D08-20-170-30-40
- Farnesyltranstransferase D08-20-170-30-50
- Geranyltranstransferase D08-20-170-30-60
- Glutathione Transferase D08-20-170-30-70+
- Glutathione S-Transferase Pi D08-20-170-30-70-10
- Hydroxymethylbilane Synthase D08-20-170-30-80
- Methionine Adenosyltransferase D08-20-170-30-90
- 3-Phosphoshikimate 1-Carboxyvinyltransferase D08-20-170-30-100
- 15-cis-Phytoene Synthase D08-20-170-30-110
- Riboflavin Synthase D08-20-170-30-120
- Spermidine Synthase D08-20-170-30-130
- Spermine Synthase D08-20-170-30-140
- Squalene Synthase D08-20-170-30-150
- Glycosyltransferases D08-20-170-40+
- N-Acetylhexosaminyltransferases D08-20-170-40-10+
- N-Acetylgalactosaminyltransferases D08-20-170-40-10-10+
- Glycoprotein-Fucosylgalactoside Alpha-N-Acetylgalactosaminyltransferase D08-20-170-40-10-10-10
- N-Acetylglucosaminyltransferases D08-20-170-40-10-20
- Hexosyltransferases D08-20-170-40-20+
- Fucosyltransferases D08-20-170-40-20-10
- Galactosyltransferases D08-20-170-40-20-20+
- N-Acylsphingosine Galactosyltransferase D08-20-170-40-20-20-10
- Beta-N-Acetylglucosaminyl-Glycopeptide Beta-1,4-Galactosyltransferase D08-20-170-40-20-20-20
- Ganglioside Galactosyltransferase D08-20-170-40-20-20-30
- Lactose Synthase D08-20-170-40-20-20-40+ #
- N-Acetylactosamine Synthase D08-20-170-40-20-20-40-10 #
- Glucosyltransferases D08-20-170-40-20-30+
- Chitin Synthase D08-20-170-40-20-30-10
- 1,4-Alpha-Glucan Branching Enzyme D08-20-170-40-20-30-20
- Glycogen Debranching Enzyme System D08-20-170-40-20-30-30 #
- Glycogen Synthase D08-20-170-40-20-30-40
- Phosphorylases D08-20-170-40-20-30-50+
- Glycogen Phosphorylase D08-20-170-40-20-30-50-10+
- Brain Form Glycogen Phosphorylase D08-20-170-40-20-30-50-10-10
- Liver Form Glycogen Phosphorylase D08-20-170-40-20-30-50-10-20
- Muscle Form Glycogen Phosphorylase D08-20-170-40-20-30-50-10-30
- Phosphorylase a D08-20-170-40-20-30-50-20
- Phosphorylase b D08-20-170-40-20-30-50-30
- Starch Phosphorylase D08-20-170-40-20-30-50-40
- Starch Synthase D08-20-170-40-20-30-60
- Glucuronosyltransferase D08-20-170-40-20-40+
- Hyaluronan Synthases D08-20-170-40-20-40-10
- \* UDP-Glucuronosyltransferase UGT1A9 D08-20-170-40-20-40-20
- Mannosyltransferases D08-20-170-40-20-50
- Peptidoglycan Glycosyltransferase D08-20-170-40-20-60
- Pentosyltransferases D08-20-170-40-30+
- Adenine Phosphoribosyltransferase D08-20-170-40-30-10
- ADP Ribose Transferases D08-20-170-40-30-20+
- NAD+ Nucleosidase D08-20-170-40-30-20-10+ #
- ADP-Ribosyl Cyclase D08-20-170-40-30-20-10-10 #



- Poly(ADP-Ribose) Polymerases D08-20-170-40-30-20-20+
- Poly (ADP-Ribose) Polymerase-1 D08-20-170-40-30-20-20-10
- Tankyrases D08-20-170-40-30-20-20-20
- Sirtuins D08-20-170-40-30-20-30+ #
- Sirtuin 2 D08-20-170-40-30-20-30-10 #
- Sirtuin 3 D08-20-170-40-30-20-30-20 #
- コレラ毒素 D08-20-170-40-30-20-40 #
- ジフテリア毒素 D08-20-170-40-30-20-50+ #
- Denileukin Diftitox D08-20-170-40-30-20-50-10 #
- 百日咳毒素 D08-20-170-40-30-20-60 #
- Amidophosphoribosyltransferase D08-20-170-40-30-30
- Anthranilate Phosphoribosyltransferase D08-20-170-40-30-40 #
- ATP Phosphoribosyltransferase D08-20-170-40-30-50
- Hypoxanthine Phosphoribosyltransferase D08-20-170-40-30-60
- Nicotinamide Phosphoribosyltransferase D08-20-170-40-30-70
- Orotate Phosphoribosyltransferase D08-20-170-40-30-80
- Purine-Nucleoside Phosphorylase D08-20-170-40-30-90
- Pyrimidine-Nucleoside Phosphorylase D08-20-170-40-30-100+
- Thymidine Phosphorylase D08-20-170-40-30-100-10 #
- Uridine Phosphorylase D08-20-170-40-30-100-20
- Sialyltransferases D08-20-170-40-40
- Nitrogenous Group Transferases D08-20-170-50+
- Transaminases D08-20-170-50-10+
- Alanine Transaminase D08-20-170-50-10-10
- D-Alanine Transaminase D08-20-170-50-10-20
- 2-Amino adipate Transaminase D08-20-170-50-10-30
- 4-Aminobutyrate Transaminase D08-20-170-50-10-40
- Aspartate Aminotransferases D08-20-170-50-10-50+
- Cytoplasmic Aspartate Aminotransferase D08-20-170-50-10-50-10
- Mitochondrial Aspartate Aminotransferase D08-20-170-50-10-50-20
- Beta-Alanine-Pyruvate Transaminase D08-20-170-50-10-60
- Glutamate Synthase (NADPH) D08-20-170-50-10-70 #
- Glutamine-Fructose-6-Phosphate Transaminase (Isomerizing) D08-20-170-50-10-80
- Glycine Transaminase D08-20-170-50-10-90
- Leucine Transaminase D08-20-170-50-10-100
- L-Lysine 6-Transaminase D08-20-170-50-10-110
- Ornithine Aminotransferase D08-20-170-50-10-120
- Succinyl diaminopimelate Transaminase D08-20-170-50-10-130
- Tryptophan Transaminase D08-20-170-50-10-140
- Tyrosine Transaminase D08-20-170-50-10-150
- One-Carbon Group Transferases D08-20-170-60+
- Amidino transferases D08-20-170-60-10
- Carboxyl Transferases and Carbamoyl Transferases D08-20-170-60-20+
- Aspartate Carbamoyltransferase D08-20-170-60-20-10 #
- Ornithine Carbamoyltransferase D08-20-170-60-20-20
- Hydroxymethyl and Formyl Transferases D08-20-170-60-30+
- Aminomethyltransferase D08-20-170-60-30-10 #
- Glutamate Formimidoyltransferase D08-20-170-60-30-20
- Glycine Hydroxymethyltransferase D08-20-170-60-30-30
- Phosphoribosylaminoimidazolecarboxamide Formyltransferase D08-20-170-60-30-40
- Phosphoribosylglycinamide Formyltransferase D08-20-170-60-30-50
- Methyltransferases D08-20-170-60-40+
- Acetylserotonin O-Methyltransferase D08-20-170-60-40-10
- Betaine-Homocysteine S-Methyltransferase D08-20-170-60-40-20
- Catechol O-Methyltransferase D08-20-170-60-40-30
- DNA Modification Methylases D08-20-170-60-40-40+ #
- DNA-Cytosine Methylases D08-20-170-60-40-40-10+
- DNA (Cytosine-5-)-Methyltransferases D08-20-170-60-40-40-10-10+
- DNA (Cytosine-5-)-methyltransferase 1 D08-20-170-60-40-40-10-10-10 #

- \* DNA Methyltransferase 3A D08-20-170-60-40-40-10-20
- Site-Specific DNA-Methyltransferase (Cytosine-N4-Specific) D08-20-170-60-40-40-10-20
- Site-Specific DNA-Methyltransferase (Adenine-Specific) D08-20-170-60-40-40-20
- Glycine N-Methyltransferase D08-20-170-60-40-50
- Guanidinoacetate N-Methyltransferase D08-20-170-60-40-60
- Histamine N-Methyltransferase D08-20-170-60-40-70
- Homocysteine S-Methyltransferase D08-20-170-60-40-80
- Methionine Synthetase D08-20-170-60-40-90
- Nicotinamide N-Methyltransferase D08-20-170-60-40-100
- Phenylethanolamine N-Methyltransferase D08-20-170-60-40-110
- Phosphatidylethanolamine N-Methyltransferase D08-20-170-60-40-120
- Phosphatidyl-N-Methylethanolamine N-Methyltransferase D08-20-170-60-40-130
- Protein Methyltransferases D08-20-170-60-40-140+
- \* Histone Methyltransferase D08-20-170-60-40-140-10+
- Histone-Lysine N-Methyltransferase D08-20-170-60-40-140-10-10+
- Polycomb Repressive Complex 2 D08-20-170-60-40-140-10-10-10+ #
- Enhancer of Zeste Homolog 2 Protein D08-20-170-60-40-140-10-10-10-10 #
- Methylated-DNA-(Protein)-Cysteine S-Methyltransferase D08-20-170-60-40-140-20
- Positive Regulatory Domain I-Binding Factor 1 D08-20-170-60-40-140-30 #
- Protein-Arginine N-Methyltransferases D08-20-170-60-40-140-40
- Protein O-Methyltransferase D08-20-170-60-40-140-50+
- Protein-L-Isoaspartate(D-Aspartate) O-Methyltransferase D08-20-170-60-40-140-50-10
- Thymidylate Synthase D08-20-170-60-40-150
- tRNA Methyltransferases D08-20-170-60-40-160+
- AlkB Homolog 8, tRNA Methyltransferase D08-20-170-60-40-160-10 #
- Phosphotransferases D08-20-170-70+
- Diphosphotransferases D08-20-170-70-10+
- GTP Diphosphokinase D08-20-170-70-10-10
- Ribose-Phosphate Diphosphokinase D08-20-170-70-10-20
- Thiamine Diphosphokinase D08-20-170-70-10-30
- Myosin Type III D08-20-170-70-20 #
- Nucleotidyltransferases D08-20-170-70-30+
- N-Acylneuraminate Cytidyltransferase D08-20-170-70-30-10
- Choline-Phosphate Cytidyltransferase D08-20-170-70-30-20
- DNA Nucleotidyltransferases D08-20-170-70-30-30+
- DNA-Directed DNA Polymerase D08-20-170-70-30-30-10+
- DNA Polymerase I D08-20-170-70-30-30-10-10
- DNA Polymerase II D08-20-170-70-30-30-10-20
- DNA Polymerase III D08-20-170-70-30-30-10-30
- DNA Polymerase Beta D08-20-170-70-30-30-10-40
- DNA Polymerase Gamma D08-20-170-70-30-30-10-50 #
- RNA-Directed DNA Polymerase D08-20-170-70-30-30-10-60+ #
- HIV Reverse Transcriptase D08-20-170-70-30-30-10-60-10 #
- Telomerase D08-20-170-70-30-30-10-60-20+ #
- Telomerase Reverse Transcriptase D08-20-170-70-30-30-10-60-20-10 #
- Taq Polymerase D08-20-170-70-30-30-10-70
- DNA Nucleotidylexotransferase D08-20-170-70-30-30-20
- Glucose-1-Phosphate Adenylyltransferase D08-20-170-70-30-40
- Nicotinamide-Nucleotide Adenylyltransferase D08-20-170-70-30-50 #
- 2',5'-Oligoadenylate Synthetase D08-20-170-70-30-60
- Polynucleotide Adenylyltransferase D08-20-170-70-30-70
- Rec A Recombinases D08-20-170-70-30-80 #
- RNA Nucleotidyltransferases D08-20-170-70-30-90+
- DNA-Directed RNA Polymerases D08-20-170-70-30-90-10+
- DNA Primase D08-20-170-70-30-90-10-10
- RNA Polymerase I D08-20-170-70-30-90-10-20
- RNA Polymerase II D08-20-170-70-30-90-10-30
- RNA Polymerase III D08-20-170-70-30-90-10-40
- RNA Polymerase Sigma 54 D08-20-170-70-30-90-10-50 #

Polyribonucleotide Nucleotidyltransferase D08-20-170-70-30-90-20  
 Q Beta Replicase D08-20-170-70-30-90-30  
 RNA-Directed RNA Polymerase D08-20-170-70-30-90-40+  
 \* Coronavirus RNA-Dependent RNA Polymerase D08-20-170-70-30-90-40-10 #  
 RNA Helicases D08-20-170-70-30-90-50+  
     DEAD-Box RNA Helicases D08-20-170-70-30-90-50-10+  
         DEAD Box Protein 20 D08-20-170-70-30-90-50-10-10 #  
         DEAD Box Protein 58 D08-20-170-70-30-90-50-10-20  
         IFIH1 Interferon-Induced Helicase D08-20-170-70-30-90-50-10-30 #  
     Eukaryotic Initiation Factor-4A D08-20-170-70-30-90-50-20 #  
 Self-Splicing Ribosomal RNA D08-20-170-70-30-90-60 #  
 触媒DNA D08-20-170-70-30-90-70 #  
 Sulfate Adenylyltransferase D08-20-170-70-30-100  
 Transposases D08-20-170-70-30-110+ #  
     HIV Integrase D08-20-170-70-30-110-10 #  
 Transposon Resolvases D08-20-170-70-30-120 #  
 UDPglucose-Hexose-1-Phosphate Uridyltransferase D08-20-170-70-30-130  
 UTP-Glucose-1-Phosphate Uridyltransferase D08-20-170-70-30-140  
 UTP-Hexose-1-Phosphate Uridyltransferase D08-20-170-70-30-150  
 VDJ Recombinases D08-20-170-70-30-160 #  
 Phosphotransferases (Alcohol Group Acceptor) D08-20-170-70-40+  
     Adenosine Kinase D08-20-170-70-40-10  
     Choline Kinase D08-20-170-70-40-20  
     Deoxycytidine Kinase D08-20-170-70-40-30  
     Diacylglycerol Kinase D08-20-170-70-40-40  
     Fructokinases D08-20-170-70-40-50+  
         Phosphofructokinases D08-20-170-70-40-50-10+  
             6-Phosphofructokinase D08-20-170-70-40-50-10-10+  
                 Liver Type Phosphofructokinase-1 D08-20-170-70-40-50-10-10-10  
                 Muscle Type Phosphofructokinase-1 D08-20-170-70-40-50-10-10-20  
                 Type C Phosphofructokinase-1 D08-20-170-70-40-50-10-10-30  
             6-Phosphofructo-2-kinase D08-20-170-70-40-50-10-20 #  
     Galactokinase D08-20-170-70-40-60  
     Glucokinase D08-20-170-70-40-70  
     Glycerol Kinase D08-20-170-70-40-80  
     Hexokinase D08-20-170-70-40-90  
     Kanamycin Kinase D08-20-170-70-40-100  
     1-Phosphatidylinositol 4-Kinase D08-20-170-70-40-110  
     Phosphatidylinositol 3-Kinases D08-20-170-70-40-120+ #  
         Phosphatidylinositol 3-Kinase D08-20-170-70-40-120-10+ #  
             Class I Phosphatidylinositol 3-Kinases D08-20-170-70-40-120-10-10+ #  
                 Class Ia Phosphatidylinositol 3-Kinase D08-20-170-70-40-120-10-10-10 #  
                 Class Ib Phosphatidylinositol 3-Kinase D08-20-170-70-40-120-10-10-20 #  
             Class II Phosphatidylinositol 3-Kinases D08-20-170-70-40-120-10-20 #  
             Class III Phosphatidylinositol 3-Kinases D08-20-170-70-40-120-10-30+ #  
                 Vacuolar Sorting Protein VPS15 D08-20-170-70-40-120-10-30-10 #  
         Phosphatidylinositol-4-Phosphate 3-Kinase D08-20-170-70-40-120-20+ #  
             Class I Phosphatidylinositol 3-Kinases D08-20-170-70-40-120-20-10+ #  
                 Class Ia Phosphatidylinositol 3-Kinase D08-20-170-70-40-120-20-10-10 #  
                 Class Ib Phosphatidylinositol 3-Kinase D08-20-170-70-40-120-20-10-20 #  
             Class II Phosphatidylinositol 3-Kinases D08-20-170-70-40-120-20-20 #  
     Phosphoenolpyruvate Sugar Phosphotransferase System D08-20-170-70-40-130 #  
     Polynucleotide 5'-Hydroxyl-Kinase D08-20-170-70-40-140 #  
     Protein Kinases D08-20-170-70-40-150+  
         Connectin D08-20-170-70-40-150-10 #  
         Histidine Kinase D08-20-170-70-40-150-20  
         Phosphorylase Kinase D08-20-170-70-40-150-30  
         Protein Serine-Threonine Kinases D08-20-170-70-40-150-40+ #  
             Activin Receptor D08-20-170-70-40-150-40-10+ #

- Activin Receptors Type I D08-20-170-70-40-150-40-10-10 #
- Activin Receptors Type II D08-20-170-70-40-150-40-10-20 #
- \* AMP-Activated Protein Kinase Kinases D08-20-170-70-40-150-40-20 #
- AMP-Activated Protein Kinases D08-20-170-70-40-150-40-30 #
- Aurora Kinases D08-20-170-70-40-150-40-40+ #
- Aurora Kinase A D08-20-170-70-40-150-40-40-10 #
- Aurora Kinase B D08-20-170-70-40-150-40-40-20 #
- Aurora Kinase C D08-20-170-70-40-150-40-40-30 #
- Autophagy-Related Protein-1 Homolog D08-20-170-70-40-150-40-50 #
- c-akt癌原遺伝子タンパク質 D08-20-170-70-40-150-40-60 #
- c-bcr癌原遺伝子タンパク質 D08-20-170-70-40-150-40-70 #
- c-pim-1癌原遺伝子タンパク質 D08-20-170-70-40-150-40-80 #
- Calcium-Calmodulin-Dependent Protein Kinases D08-20-170-70-40-150-40-90+ #
- Calcium-Calmodulin-Dependent Protein Kinase Kinase D08-20-170-70-40-150-40-90-10 #
- Calcium-Calmodulin-Dependent Protein Kinase Type 1 D08-20-170-70-40-150-40-90-20 #
- Calcium-Calmodulin-Dependent Protein Kinase Type 2 D08-20-170-70-40-150-40-90-30 #
- Calcium-Calmodulin-Dependent Protein Kinase Type 4 D08-20-170-70-40-150-40-90-40 #
- Death-Associated Protein Kinases D08-20-170-70-40-150-40-90-50 #
- Elongation Factor 2 Kinase D08-20-170-70-40-150-40-90-60 #
- Myosin-Light-Chain Kinase D08-20-170-70-40-150-40-90-70 #
- Casein Kinases D08-20-170-70-40-150-40-100+ #
- Casein Kinase I D08-20-170-70-40-150-40-100-10+ #
- Casein Kinase IAlpha D08-20-170-70-40-150-40-100-10-10 #
- Casein Kinase IDelta D08-20-170-70-40-150-40-100-10-20 #
- Casein Kinase IEpsilon D08-20-170-70-40-150-40-100-10-30 #
- Casein Kinase II D08-20-170-70-40-150-40-100-20 #
- Checkpoint Kinase 1 D08-20-170-70-40-150-40-110 #
- Checkpoint Kinase 2 D08-20-170-70-40-150-40-120 #
- Cyclic Nucleotide-Regulated Protein Kinases D08-20-170-70-40-150-40-130+ #
- Cyclic AMP-Dependent Protein Kinases D08-20-170-70-40-150-40-130-10+ #
- Cyclic AMP-Dependent Protein Kinase Type I D08-20-170-70-40-150-40-130-10-10+ #
- Cyclic AMP-Dependent Protein Kinase Catalytic Subunits D08-20-170-70-40-150-40-130-10-10-10 #
- Cyclic AMP-Dependent Protein Kinase RIAlpha Subunit D08-20-170-70-40-150-40-130-10-10-20 #
- Cyclic AMP-Dependent Protein Kinase RIBeta Subunit D08-20-170-70-40-150-40-130-10-10-30 #
- Cyclic AMP-Dependent Protein Kinase Type II D08-20-170-70-40-150-40-130-10-20+ #
- Cyclic AMP-Dependent Protein Kinase Catalytic Subunits D08-20-170-70-40-150-40-130-10-20-10 #
- Cyclic AMP-Dependent Protein Kinase RIAlpha Subunit D08-20-170-70-40-150-40-130-10-20-20 #
- Cyclic AMP-Dependent Protein Kinase RIIBeta Subunit D08-20-170-70-40-150-40-130-10-20-30 #
- Cyclic GMP-Dependent Protein Kinases D08-20-170-70-40-150-40-130-20+ #
- Cyclic GMP-Dependent Protein Kinase Type I D08-20-170-70-40-150-40-130-20-10 #
- Cyclic GMP-Dependent Protein Kinase Type II D08-20-170-70-40-150-40-130-20-20 #
- Protamine Kinase D08-20-170-70-40-150-40-130-30 #
- DNA-Activated Protein Kinase D08-20-170-70-40-150-40-140 #
- \* Doublecortin-Like Kinases D08-20-170-70-40-150-40-150 #
- eIF-2 Kinase D08-20-170-70-40-150-40-160 #
- G-Protein-Coupled Receptor Kinases D08-20-170-70-40-150-40-170+ #
- Beta-Adrenergic Receptor Kinase D08-20-170-70-40-150-40-170-10+ #
- G-Protein-Coupled Receptor Kinase 2 D08-20-170-70-40-150-40-170-10-10 #
- G-Protein-Coupled Receptor Kinase 3 D08-20-170-70-40-150-40-170-10-20 #
- G-Protein-Coupled Receptor Kinase 1 D08-20-170-70-40-150-40-170-20 #
- G-Protein-Coupled Receptor Kinase 4 D08-20-170-70-40-150-40-170-30 #
- G-Protein-Coupled Receptor Kinase 5 D08-20-170-70-40-150-40-170-40 #
- \* Germinal Center Kinases D08-20-170-70-40-150-40-180 #
- Glycogen Synthetase Kinases D08-20-170-70-40-150-40-190+ #
- Glycogen Synthase Kinase 3 D08-20-170-70-40-150-40-190-10+ #
- Glycogen Synthase Kinase 3 Beta D08-20-170-70-40-150-40-190-10-10 #
- I-Kappa B Kinase D08-20-170-70-40-150-40-200 #
- Interleukin-1 Receptor-Associated Kinases D08-20-170-70-40-150-40-210 #
- Leucine-Rich Repeat Serine-Threonine Protein Kinase-2 D08-20-170-70-40-150-40-220 #

**Lim Kinases** D08-20-170-70-40-150-40-230 #  
**MAP Kinase Kinase Kinases** D08-20-170-70-40-150-40-240+ #  
     **c-mos癌原遺伝子タンパク質** D08-20-170-70-40-150-40-240-10 #  
     **MAP Kinase Kinase Kinase 1** D08-20-170-70-40-150-40-240-20 #  
     **MAP Kinase Kinase Kinase 2** D08-20-170-70-40-150-40-240-30 #  
     **MAP Kinase Kinase Kinase 3** D08-20-170-70-40-150-40-240-40 #  
     **MAP Kinase Kinase Kinase 4** D08-20-170-70-40-150-40-240-50 #  
     **MAP Kinase Kinase Kinase 5** D08-20-170-70-40-150-40-240-60 #  
     **raf Kinases** D08-20-170-70-40-150-40-240-70+ #  
         **B-raf癌原遺伝子タンパク質** D08-20-170-70-40-150-40-240-70-10 #  
         **c-raf癌原遺伝子タンパク質** D08-20-170-70-40-150-40-240-70-20 #  
         **v-raf癌原遺伝子タンパク質** D08-20-170-70-40-150-40-240-70-30 #  
**MAP Kinase Kinases** D08-20-170-70-40-150-40-250+ #  
     **MAP Kinase Kinase 1** D08-20-170-70-40-150-40-250-10 #  
     **MAP Kinase Kinase 2** D08-20-170-70-40-150-40-250-20 #  
     **MAP Kinase Kinase 3** D08-20-170-70-40-150-40-250-30 #  
     **MAP Kinase Kinase 4** D08-20-170-70-40-150-40-250-40 #  
     **MAP Kinase Kinase 5** D08-20-170-70-40-150-40-250-50 #  
     **MAP Kinase Kinase 6** D08-20-170-70-40-150-40-250-60 #  
     **MAP Kinase Kinase 7** D08-20-170-70-40-150-40-250-70 #  
**MAP Kinases** D08-20-170-70-40-150-40-260+ #  
     **Extracellular Signal-Regulated MAP Kinases** D08-20-170-70-40-150-40-260-10+ #  
         **MAP Kinase 1** D08-20-170-70-40-150-40-260-10-10 #  
         **MAP Kinase 3** D08-20-170-70-40-150-40-260-10-20 #  
         **MAP Kinase 6** D08-20-170-70-40-150-40-260-10-30 #  
         **MAP Kinase 7** D08-20-170-70-40-150-40-260-10-40 #  
     **JNK MAP Kinases** D08-20-170-70-40-150-40-260-20+ #  
         **MAP Kinase 8** D08-20-170-70-40-150-40-260-20-10 #  
         **MAP Kinase 9** D08-20-170-70-40-150-40-260-20-20 #  
         **MAP Kinase 10** D08-20-170-70-40-150-40-260-20-30 #  
     **MAP Kinase p38** D08-20-170-70-40-150-40-260-30+ #  
         **MAP Kinase 11** D08-20-170-70-40-150-40-260-30-10 #  
         **MAP Kinase 12** D08-20-170-70-40-150-40-260-30-20 #  
         **MAP Kinase 13** D08-20-170-70-40-150-40-260-30-30 #  
         **MAP Kinase 14** D08-20-170-70-40-150-40-260-30-40 #  
**Myotonin-Protein Kinase** D08-20-170-70-40-150-40-270 #  
**NIMA-Related Kinases** D08-20-170-70-40-150-40-280+ #  
     **NIMA-Related Kinase 1** D08-20-170-70-40-150-40-280-10 #  
**p21-Activated Kinases** D08-20-170-70-40-150-40-290 #  
**3-Phosphoinositide-Dependent Protein Kinases** D08-20-170-70-40-150-40-300 #  
**Phytochrome A** D08-20-170-70-40-150-40-310 #  
**Positive Transcriptional Elongation Factor B** D08-20-170-70-40-150-40-320 #  
**Proline-Directed Protein Kinases** D08-20-170-70-40-150-40-330+ #  
     **Cyclin-Dependent Kinases** D08-20-170-70-40-150-40-330-10+ #  
         **CDC2-CDC28 Kinases** D08-20-170-70-40-150-40-330-10-10+ #  
             **CDC2 Protein Kinase** D08-20-170-70-40-150-40-330-10-10-10 #  
             **Cyclin-Dependent Kinase 5** D08-20-170-70-40-150-40-330-10-10-20 #  
             **Cyclin-Dependent Kinase 9** D08-20-170-70-40-150-40-330-10-10-30 #  
             **S cerevisiae CDC28 Protein Kinase** D08-20-170-70-40-150-40-330-10-10-40 #  
         **Cyclin-Dependent Kinase 2** D08-20-170-70-40-150-40-330-10-20 #  
         **Cyclin-Dependent Kinase 3** D08-20-170-70-40-150-40-330-10-30 #  
         **Cyclin-Dependent Kinase 4** D08-20-170-70-40-150-40-330-10-40 #  
         **Cyclin-Dependent Kinase 6** D08-20-170-70-40-150-40-330-10-50 #  
         **Cyclin-Dependent Kinase 8** D08-20-170-70-40-150-40-330-10-60 #  
     **Maturation-Promoting Factor** D08-20-170-70-40-150-40-330-10-70+ #  
         **CDC2 Protein Kinase** D08-20-170-70-40-150-40-330-10-70-10 #  
     **Glycogen Synthase Kinase 3** D08-20-170-70-40-150-40-330-20+ #  
         **Glycogen Synthase Kinase 3 Beta** D08-20-170-70-40-150-40-330-20-10 #  
**Protein Kinase C** D08-20-170-70-40-150-40-340+ #

- Protein Kinase C Alpha D08-20-170-70-40-150-40-340-10 #
- Protein Kinase C Beta D08-20-170-70-40-150-40-340-20 #
- Protein Kinase C Delta D08-20-170-70-40-150-40-340-30 #
- Protein Kinase C Epsilon D08-20-170-70-40-150-40-340-40 #
- Protein Kinase C-Theta D08-20-170-70-40-150-40-340-50 #
- \* Protein Kinase D2 D08-20-170-70-40-150-40-350 #
- \* Pyruvate Dehydrogenase Acetyl-Transferring Kinase D08-20-170-70-40-150-40-360 #
- Receptor-Interacting Protein-Serine-Threonine Kinases D08-20-170-70-40-150-40-370+ #
- Receptor-Interacting Protein-Serine-Threonine Kinase 2 D08-20-170-70-40-150-40-370-10 #
- Rho-Associated Kinase D08-20-170-70-40-150-40-380 #
- \* STK3 Protein D08-20-170-70-40-150-40-390 #
- TOR Serine-Threonine Kinases D08-20-170-70-40-150-40-400+ #
- Mechanistic Target of Rapamycin Complex 1 D08-20-170-70-40-150-40-400-10+ #
- LST8 Homolog mTOR Associated Protein D08-20-170-70-40-150-40-400-10-10 #
- Regulatory-Associated Protein of mTOR D08-20-170-70-40-150-40-400-10-20 #
- Mechanistic Target of Rapamycin Complex 2 D08-20-170-70-40-150-40-400-20+ #
- Rapamycin-Insensitive Companion of mTOR Protein D08-20-170-70-40-150-40-400-20-10 #
- \* Transforming Growth Factor Beta Type I Receptor D08-20-170-70-40-150-40-410 #
- \* Transforming Growth Factor-Beta Type II Receptor D08-20-170-70-40-150-40-420 #
- v-akt癌遺伝子タンパク質 D08-20-170-70-40-150-40-430 #
- Vacuolar Sorting Protein VPS15 D08-20-170-70-40-150-40-440 #
- WNK Lysine-Deficient Protein Kinase 1 D08-20-170-70-40-150-40-450 #
- 血管拡張性運動失調症変異タンパク質 D08-20-170-70-40-150-40-460 #
- 骨形成因子受容体 D08-20-170-70-40-150-40-470+ #
- 骨形成因子受容体I型 D08-20-170-70-40-150-40-470-10 #
- 骨形成因子受容体II型 D08-20-170-70-40-150-40-470-20 #
- リボソームタンパク質S6キナーゼ D08-20-170-70-40-150-40-480+ #
- リボソームタンパク質S6キナーゼ70-kDa D08-20-170-70-40-150-40-480-10 #
- リボソームタンパク質S6キナーゼ90-kDa D08-20-170-70-40-150-40-480-20 #
- Protein-Tyrosine Kinases D08-20-170-70-40-150-50+ #
- \* Agammaglobulinaemia Tyrosine Kinase D08-20-170-70-40-150-50-10 #
- c-abl癌原遺伝子タンパク質 D08-20-170-70-40-150-50-20+ #
- bcr-abl融合タンパク質 D08-20-170-70-40-150-50-20-10 #
- c-fes癌原遺伝子タンパク質 D08-20-170-70-40-150-50-30 #
- Focal Adhesion Protein-Tyrosine Kinases D08-20-170-70-40-150-50-40+ #
- Focal Adhesion Kinase 1 D08-20-170-70-40-150-50-40-10 #
- Focal Adhesion Kinase 2 D08-20-170-70-40-150-50-40-20 #
- Janus Kinases D08-20-170-70-40-150-50-50+ #
- Janus Kinase 1 D08-20-170-70-40-150-50-50-10 #
- Janus Kinase 2 D08-20-170-70-40-150-50-50-20 #
- Janus Kinase 3 D08-20-170-70-40-150-50-50-30 #
- TYK2 Kinase D08-20-170-70-40-150-50-50-40 #
- MAP Kinase Kinases D08-20-170-70-40-150-50-60+ #
- MAP Kinase Kinase 1 D08-20-170-70-40-150-50-60-10 #
- MAP Kinase Kinase 2 D08-20-170-70-40-150-50-60-20 #
- MAP Kinase Kinase 3 D08-20-170-70-40-150-50-60-30 #
- MAP Kinase Kinase 4 D08-20-170-70-40-150-50-60-40 #
- MAP Kinase Kinase 5 D08-20-170-70-40-150-50-60-50 #
- MAP Kinase Kinase 6 D08-20-170-70-40-150-50-60-60 #
- MAP Kinase Kinase 7 D08-20-170-70-40-150-50-60-70 #
- Receptor Protein-Tyrosine Kinases D08-20-170-70-40-150-50-70+ #
- \* Anaplastic Lymphoma Kinase D08-20-170-70-40-150-50-70-10 #
- c-kit癌原遺伝子タンパク質 D08-20-170-70-40-150-50-70-20 #
- c-Mer Tyrosine Kinase D08-20-170-70-40-150-50-70-30 #
- c-met癌原遺伝子タンパク質 D08-20-170-70-40-150-50-70-40 #
- c-ret癌原遺伝子タンパク質 D08-20-170-70-40-150-50-70-50 #
- Discoidin Domain Receptors D08-20-170-70-40-150-50-70-60+ #
- Discoidin Domain Receptor 1 D08-20-170-70-40-150-50-70-60-10 #
- Discoidin Domain Receptor 2 D08-20-170-70-40-150-50-70-60-20 #

Eph Family Receptors	D08-20-170-70-40-150-50-70-70+ #
EphA1 Receptor	D08-20-170-70-40-150-50-70-70-10 #
EphA2 Receptor	D08-20-170-70-40-150-50-70-70-20 #
EphA3 Receptor	D08-20-170-70-40-150-50-70-70-30 #
EphA4 Receptor	D08-20-170-70-40-150-50-70-70-40 #
EphA5 Receptor	D08-20-170-70-40-150-50-70-70-50 #
EphA6 Receptor	D08-20-170-70-40-150-50-70-70-60 #
EphA7 Receptor	D08-20-170-70-40-150-50-70-70-70 #
EphA8 Receptor	D08-20-170-70-40-150-50-70-70-80 #
EphB1 Receptor	D08-20-170-70-40-150-50-70-70-90 #
EphB2 Receptor	D08-20-170-70-40-150-50-70-70-100 #
EphB3 Receptor	D08-20-170-70-40-150-50-70-70-110 #
EphB4 Receptor	D08-20-170-70-40-150-50-70-70-120 #
EphB5 Receptor	D08-20-170-70-40-150-50-70-70-130 #
ErbB Receptors	D08-20-170-70-40-150-50-70-80+ #
ErbB-2 Receptor	D08-20-170-70-40-150-50-70-80-10 #
ErbB-3 Receptor	D08-20-170-70-40-150-50-70-80-20 #
ErbB-4 Receptor	D08-20-170-70-40-150-50-70-80-30 #
fms-Like Tyrosine Kinase 3	D08-20-170-70-40-150-50-70-90 #
IGF Type 1 Receptor	D08-20-170-70-40-150-50-70-100 #
Insulin Receptor	D08-20-170-70-40-150-50-70-110 #
Macrophage Colony-Stimulating Factor Receptor	D08-20-170-70-40-150-50-70-120 #
Platelet-Derived Growth Factor Receptors	D08-20-170-70-40-150-50-70-130+ #
Platelet-Derived Growth Factor Alpha Receptor	D08-20-170-70-40-150-50-70-130-10 #
Platelet-Derived Growth Factor Beta Receptor	D08-20-170-70-40-150-50-70-130-20 #
Receptor Tyrosine Kinase-Like Orphan Receptors	D08-20-170-70-40-150-50-70-140 #
TIE Receptors	D08-20-170-70-40-150-50-70-150+ #
TIE-1 Receptor	D08-20-170-70-40-150-50-70-150-10 #
TIE-2 Receptor	D08-20-170-70-40-150-50-70-150-20 #
trkA Receptor	D08-20-170-70-40-150-50-70-160 #
trkB Receptor	D08-20-170-70-40-150-50-70-170 #
trkC Receptor	D08-20-170-70-40-150-50-70-180 #
Vascular Endothelial Growth Factor Receptors	D08-20-170-70-40-150-50-70-190+ #
Aflibercept	D08-20-170-70-40-150-50-70-190-10 #
Vascular Endothelial Growth Factor Receptor-1	D08-20-170-70-40-150-50-70-190-20 #
Vascular Endothelial Growth Factor Receptor-2	D08-20-170-70-40-150-50-70-190-30 #
Vascular Endothelial Growth Factor Receptor-3	D08-20-170-70-40-150-50-70-190-40 #
線維芽細胞増殖因子受容体-1	D08-20-170-70-40-150-50-70-200 #
線維芽細胞増殖因子受容体-2	D08-20-170-70-40-150-50-70-210 #
線維芽細胞増殖因子受容体-3	D08-20-170-70-40-150-50-70-220 #
線維芽細胞増殖因子受容体-4	D08-20-170-70-40-150-50-70-230 #
src-Family Kinases	D08-20-170-70-40-150-50-80+ #
c-fyn癌原遺伝子タンパク質	D08-20-170-70-40-150-50-80-10 #
c-hck癌原遺伝子タンパク質	D08-20-170-70-40-150-50-80-20 #
c-src癌原遺伝子タンパク質pp60	D08-20-170-70-40-150-50-80-30 #
c-yes癌原遺伝子タンパク質	D08-20-170-70-40-150-50-80-40 #
* CSK Tyrosine-Protein Kinase	D08-20-170-70-40-150-50-80-50 #
Lymphocyte Specific Protein Tyrosine Kinase p56(lck)	D08-20-170-70-40-150-50-80-60 #
v-src癌原遺伝子タンパク質pp60	D08-20-170-70-40-150-50-80-70 #
Syk Kinase	D08-20-170-70-40-150-50-90 #
ZAP-70 Protein-Tyrosine Kinase	D08-20-170-70-40-150-50-100 #
Pyridoxal Kinase	D08-20-170-70-40-160
Pyruvate Kinase	D08-20-170-70-40-170
Thymidine Kinase	D08-20-170-70-40-180
Uridine Kinase	D08-20-170-70-40-190
Phosphotransferases (Carboxyl Group Acceptor)	D08-20-170-70-50+
Acetate Kinase	D08-20-170-70-50-10
Aspartate Kinase	D08-20-170-70-50-20+
Aspartokinase Homoserine Dehydrogenase	D08-20-170-70-50-20-10 #

- Phosphoglycerate Kinase D08-20-170-70-50-30
- Phosphotransferases (Nitrogenous Group Acceptor) D08-20-170-70-60+
- Arginine Kinase D08-20-170-70-60-10
- Creatine Kinase D08-20-170-70-60-20+
- BB Form Creatine Kinase D08-20-170-70-60-20-10
- MB Form Creatine Kinase D08-20-170-70-60-20-20
- Mitochondrial Form Creatine Kinase D08-20-170-70-60-20-30 #
- MM Form Creatine Kinase D08-20-170-70-60-20-40
- Phosphotransferases (Paired Acceptors) D08-20-170-70-70+
- Pyruvate, Phosphate Dikinase D08-20-170-70-70-10
- Phosphotransferases (Phosphate Group Acceptor) D08-20-170-70-80+
- Adenylate Kinase D08-20-170-70-80-10
- ATP Synthetase Complexes D08-20-170-70-80-20+
- Proton-Translocating ATPases D08-20-170-70-80-20-10+ #
- Bacterial Proton-Translocating ATPases D08-20-170-70-80-20-10-10 #
- Chloroplast Proton-Translocating ATPases D08-20-170-70-80-20-10-20 #
- Mitochondrial Proton-Translocating ATPases D08-20-170-70-80-20-10-30 #
- Vacuolar Proton-Translocating ATPases D08-20-170-70-80-20-10-40 #
- Guanylate Kinases D08-20-170-70-80-30+
- Discs Large Homolog 1 Protein D08-20-170-70-80-30-10 #
- Disks Large Homolog 4 Protein D08-20-170-70-80-30-20 #
- Nucleoside-Diphosphate Kinase D08-20-170-70-80-40+
- NM23 Nucleoside Diphosphate Kinases D08-20-170-70-80-40-10+
- Nucleoside Diphosphate Kinase D D08-20-170-70-80-40-10-10 #
- Nucleoside-Phosphate Kinase D08-20-170-70-80-50
- Transferases (Other Substituted Phosphate Groups) D08-20-170-70-90+
- CDP-Diacylglycerol-Inositol 3-Phosphatidyltransferase D08-20-170-70-90-10
- CDP-Diacylglycerol-Serine O-Phosphatidyltransferase D08-20-170-70-90-20
- Diacylglycerol Cholinephosphotransferase D08-20-170-70-90-30
- Ethanolaminephosphotransferase D08-20-170-70-90-40
- Sulfur Group Transferases D08-20-170-80+
- Coenzyme A-Transferases D08-20-170-80-10
- Sulfotransferases D08-20-170-80-20+
- Aryl Sulfotransferase D08-20-170-80-20-10
- Sulfurtransferases D08-20-170-80-30+
- Thiosulfate Sulfurtransferase D08-20-170-80-30-10
- 分解酵素 D08-20-180+
- Carbon-Carbon Lyases D08-20-180-10+
- Aldehyde-Lyases D08-20-180-10-10+
- Fructose-Bisphosphate Aldolase D08-20-180-10-10-10
- Carboxy-Lyases D08-20-180-10-20+
- Adenosylmethionine Decarboxylase D08-20-180-10-20-10
- Aromatic-L-Amino-Acid Decarboxylases D08-20-180-10-20-20+
- Dopa Decarboxylase D08-20-180-10-20-20-10 #
- Glutamate Decarboxylase D08-20-180-10-20-30
- Histidine Decarboxylase D08-20-180-10-20-40
- Indole-3-Glycerol-Phosphate Synthase D08-20-180-10-20-50
- Methylmalonyl-CoA Decarboxylase D08-20-180-10-20-60
- Ornithine Decarboxylase D08-20-180-10-20-70
- Orotidine-5'-Phosphate Decarboxylase D08-20-180-10-20-80
- Phosphoenolpyruvate Carboxykinase (ATP) D08-20-180-10-20-90
- Phosphoenolpyruvate Carboxykinase (GTP) D08-20-180-10-20-100
- Phosphoenolpyruvate Carboxylase D08-20-180-10-20-110
- Pyruvate Decarboxylase D08-20-180-10-20-120
- Ribulose-Bisphosphate Carboxylase D08-20-180-10-20-130 #
- Tyrosine Decarboxylase D08-20-180-10-20-140
- Uroporphyrinogen Decarboxylase D08-20-180-10-20-150
- Deoxyribodipyrimidine Photo-Lyase D08-20-180-10-30 #
- Oxo-Acid-Lyases D08-20-180-10-40+



- Anthranilate Synthase D08-20-180-10-40-10 #
- Isocitrate Lyase D08-20-180-10-40-20
- Tryptophanase D08-20-180-10-50
- Tyrosine Phenol-Lyase D08-20-180-10-60
- Carbon-Nitrogen Lyases D08-20-180-20+
- Amidine-Lyases D08-20-180-20-10+
- Adenylosuccinate Lyase D08-20-180-20-10-10
- Argininosuccinate Lyase D08-20-180-20-10-20+
- Delta-Crystallins D08-20-180-20-10-20-10 #
- Ammonia-Lyases D08-20-180-20-20+
- Aspartate Ammonia-Lyase D08-20-180-20-20-10
- Ethanolamine Ammonia-Lyase D08-20-180-20-20-20
- Histidine Ammonia-Lyase D08-20-180-20-20-30
- Phenylalanine Ammonia-Lyase D08-20-180-20-20-40
- L-Serine Ammonia-Lyase D08-20-180-20-20-50
- Threonine Ammonia-Lyase D08-20-180-20-20-60
- Carbon-Oxygen Lyases D08-20-180-30+
- DNA-(Apurinic or Apyrimidinic Site) Lyase D08-20-180-30-10 #
- Hydro-Lyases D08-20-180-30-20+
- Aconitate Hydratase D08-20-180-30-20-10+
- Iron Regulatory Protein 1 D08-20-180-30-20-10-10 #
- Iron Regulatory Protein 2 D08-20-180-30-20-10-20 #
- Carbonic Anhydrases D08-20-180-30-20-20+
- Carbonic Anhydrase I D08-20-180-30-20-20-10
- Carbonic Anhydrase II D08-20-180-30-20-20-20
- Carbonic Anhydrase III D08-20-180-30-20-20-30
- Carbonic Anhydrase IV D08-20-180-30-20-20-40 #
- Carbonic Anhydrase V D08-20-180-30-20-20-50
- Carbonic Anhydrase IX D08-20-180-30-20-20-60 #
- Cystathionine Beta-Synthase D08-20-180-30-20-30
- Enoyl-CoA Hydratase D08-20-180-30-20-40+
- Mitochondrial Trifunctional Protein D08-20-180-30-20-40-10+ #
- Mitochondrial Trifunctional Protein, Alpha Subunit D08-20-180-30-20-40-10-10 #
- Peroxisomal Bifunctional Enzyme D08-20-180-30-20-40-20 #
- Enoyl-CoA Hydratase 2 D08-20-180-30-20-50+
- Peroxisomal Multifunctional Protein-2 D08-20-180-30-20-50-10 #
- Fatty Acid Synthase D08-20-180-30-20-60+ #
- Fatty Acid Synthase, Type I D08-20-180-30-20-60-10 #
- Fatty Acid Synthase, Type II D08-20-180-30-20-60-20 #
- Fumarate Hydratase D08-20-180-30-20-70
- Phosphopyruvate Hydratase D08-20-180-30-20-80+
- Tau-Crystallins D08-20-180-30-20-80-10 #
- Porphobilinogen Synthase D08-20-180-30-20-90
- Prephenate Dehydratase D08-20-180-30-20-100 #
- Propanediol Dehydratase D08-20-180-30-20-110
- Tryptophan Synthase D08-20-180-30-20-120 #
- Urocanate Hydratase D08-20-180-30-20-130
- Uroporphyrinogen-III Synthase D08-20-180-30-20-140
- Polysaccharide-Lyases D08-20-180-30-30+
- Chondroitinases and Chondroitin Lyases D08-20-180-30-30-10+ #
- Chondroitin Lyases D08-20-180-30-30-10-10+
- Chondroitin-Sulfate-ABC Endolyase D08-20-180-30-30-10-10-10
- Heparin Lyase D08-20-180-30-30-20
- Hyaluronoglucosaminidase D08-20-180-30-30-30+ #
- \* Vorhyaluronidase Alfa D08-20-180-30-30-30-10 #
- Carbon-Sulfur Lyases D08-20-180-40+
- Cystathionine Gamma-Lyase D08-20-180-40-10
- Lactoylglutathione Lyase D08-20-180-40-20
- Ferrochelatae D08-20-180-50 #

- Phosphorus-Oxygen Lyases D08-20-180-60+
- Adenylyl Cyclases D08-20-180-60-10+ #
- Adenylate Cyclase Toxin D08-20-180-60-10-10 #
- Guanylate Cyclase D08-20-180-60-20+ #
- Guanylate Cyclase Coupled Receptors D08-20-180-60-20-10+ #
- Atrial Natriuretic Factor Receptors D08-20-180-60-20-10-10 #
- Enterotoxin Receptors D08-20-180-60-20-10-20 #
- Soluble Guanylyl Cyclase D08-20-180-60-20-20 #
- Phosphatidylinositol Diacylglycerol-Lyase D08-20-180-60-30 #
- 酵素前駆体 D08-30+ #
- Chymotrypsinogen D08-30-10 #
- Pepsinogens D08-30-20+ #
- Pepsinogen A D08-30-20-10 #
- Pepsinogen C D08-30-20-20 #
- Plasminogen D08-30-30+ #
- Angiostatins D08-30-30-10 #
- Prekallikrein D08-30-40 #
- Protein C D08-30-50+ #
- Drotrecogin Alfa Activated D08-30-50-10 #
- Prothrombin D08-30-60+ #
- Acarboxyprothrombin D08-30-60-10 #
- Trypsinogen D08-30-70 #
- 血液凝固第VII因子 D08-30-80 #
- 血液凝固第IX因子 D08-30-90+ #
- Albutrepenonacog Alfa D08-30-90-10 #
- Eftrenonacog Alfa D08-30-90-20 #
- Nonacog Alfa D08-30-90-30 #
- Nonacog Beta Pegol D08-30-90-40 #
- Nonacog Gamma D08-30-90-50 #
- 血液凝固第X因子 D08-30-100 #
- 血液凝固第XI因子 D08-30-110 #
- 血液凝固第XII因子 D08-30-120 #
- 血液凝固第XIII因子 D08-30-130+ #
- Catridecacog D08-30-130-10 #
- 補体因子B D08-30-140 #
- 補酵素 D08-40+
- Biopterin D08-40-10+ #
- Neopterin D08-40-10-10 #
- Sapropterin D08-40-10-20 #
- 5,6,7,8-Tetrahydrobiopterin D08-40-10-30 #
- Biotin D08-40-20 #
- Cobamides D08-40-30+ #
- Cobamamide D08-40-30-10 #
- Coenzyme A D08-40-40+ #
- Acyl Coenzyme A D08-40-40-10+ #
- Acetyl Coenzyme A D08-40-40-10-10 #
- Malonyl Coenzyme A D08-40-40-10-20 #
- Palmitoyl Coenzyme A D08-40-40-10-30 #
- Flavins D08-40-50+ #
- Riboflavin D08-40-50-10+ #
- Flavin-Adenine Dinucleotide D08-40-50-10-10 #
- Flavin Mononucleotide D08-40-50-10-20 #
- \* Molybdenum Cofactors D08-40-60+
- Molybdoferredoxin D08-40-60-10 #
- NAD D08-40-70 #
- NADP D08-40-80 #
- PQQ Cofactor D08-40-90 #
- Pyridoxal Phosphate D08-40-100+ #
- Mangafodipir D08-40-100-10 #

**Sphingolipid Activator Proteins** D08-40-110+

**G(M2) Activator Protein** D08-40-110-10

**Saposins** D08-40-110-20

**Tetrahydrofolates** D08-40-120+ #

**Formyltetrahydrofolates** D08-40-120-10+ #

**Leucovorin** D08-40-120-10-10 #

**Thiamine Pyrophosphate** D08-40-130 #

**Thioctic Acid** D08-40-140 #

**Ubiquinone** D08-40-150+ #

**Idebenone** D08-40-150-10 #

**Ubidecarenone** D08-40-150-20 #