
Subsystem Feature Counts

Nitrogen Metabolism (25)

Nitrogen Metabolism - no subcategory (21)

Denitrification (4)

Stress Response (96)

Osmotic stress (26)

Dessication stress (0)

Acid stress (0)

Oxidative stress (47)

Cold shock (0)

Heat shock (0)

Detoxification (15)

Stress Response - no subcategory (11)

Periplasmic Stress (5)

Virulence, Disease and Defense (53)

Adhesion (0)

Toxins and superantigens (0)

Bacteriocins, ribosomally synthesized antibacterial peptides (1)

Resistance to antibiotics and toxic compounds (40)

Virulence, Disease and Defense - no subcategory (0)

Detection (0)

Invasion and intracellular resistance (12)

Motility and Chemotaxis (62)

Magnetotaxis (0)

Motility and Chemotaxis - no subcategory (0)

Flagellar motility in Prokaryota (62)

Social motility and nonflagellar swimming in bacteria (0)

Amino Acids and Derivatives (435)

Glutamine, glutamate, aspartate, asparagine; ammonia assimilation (25)

Histidine Metabolism (16)

Arginine; urea cycle, polyamines (112)

Lysine, threonine, methionine, and cysteine (86)

Amino Acids and Derivatives - no subcategory (6)

Branched-chain amino acids (82)

Polyamines (0)

Aromatic amino acids and derivatives (56)

Proline and 4-hydroxyproline (9)

Alanine, serine, and glycine (43)

Sulfur Metabolism (4)

Inorganic sulfur assimilation (0)

Sulfur Metabolism - no subcategory (4)

Organic sulfur assimilation (0)

Phosphorus Metabolism (44)

Phosphorus Metabolism - no subcategory (44)

Carbohydrates (248)

Central carbohydrate metabolism (112)

Aminosugars (3)

Di- and oligosaccharides (0)

Glycoside hydrolases (0)

One-carbon Metabolism (6)

Organic acids (18)

Fermentation (59)

CO₂ fixation (2)

Sugar alcohols (25)

Carbohydrates - no subcategory (1)

Polysaccharides (0)

Monosaccharides (22)

Cofactors, Vitamins, Prosthetic Groups, Pigment (197)

Biotin (36)

Cofactors, Vitamins, Prosthetic Groups, Pigments - no subcategory (7)

Quinone cofactors (0)

Tetrapyrroles (40)

Riboflavin, FMN, FAD (16)

Fe-S clusters (0)

Mycofactocin (0)

Pyridoxine (11)

NAD and NADP (15)

Coenzyme B (0)

Folate and pterines (58)

Lipoic acid (1)

Coenzyme F420 (0)

Coenzyme M (0)

Coenzyme A (13)

Cell Wall and Capsule (51)

Capsular and extracellular polysaccharides (34)

Gram-Negative cell wall components (2)

Cell Wall and Capsule - no subcategory (15)

Gram-Positive cell wall components (0)

Cell wall of Mycobacteria (0)

Potassium metabolism (9)

Potassium metabolism - no subcategory (9)

Miscellaneous (39)

Conversion of Succinyl-CoA to Propionyl-CoA (0)

Plant-Prokaryote DOE project (25)

Miscellaneous - no subcategory (14)
Phages, Prophages, Transposable elements, Plasmids (16)
Phage family-specific subsystems (0)
Transposable elements (0)
Phages, Prophages (16)
Phages, Prophages, Transposable elements, Plasmids - no subcategory (0)
Pathogenicity islands (0)
Gene Transfer Agent (GTA) (0)
Plasmid related functions (0)
Membrane Transport (135)
Protein secretion system, Type II (0)
ABC transporters (15)
Protein secretion system, Type VII (Chaperone/Usher pathway, CU) (5)
Protein translocation across cytoplasmic membrane (4)
Protein secretion system, Type V (0)
Protein secretion system, Type I (4)
Cation transporters (4)
Protein secretion system, Type III (0)
Uni- Sym- and Antiporters (17)
Membrane Transport - no subcategory (16)
TRAP transporters (56)
Sugar Phosphotransferase Systems, PTS (0)
Protein secretion system, Type VI (0)
Protein secretion system, Type VIII (Extracellular nucleation/precipitation pathway, ENP) (3)
Protein and nucleoprotein secretion system, Type IV (11)
Iron acquisition and metabolism (19)
Siderophores (6)
Iron acquisition and metabolism - no subcategory (13)
Iron transpot (0)
RNA Metabolism (58)
RNA processing and modification (32)
Transcription (26)
RNA Metabolism - no subcategory (0)
Nucleosides and Nucleotides (93)
Pyrimidines (12)
Purines (55)
Nucleosides and Nucleotides - no subcategory (18)
Detoxification (8)
Protein Metabolism (231)
Protein folding (25)
Selenoproteins (3)

Protein biosynthesis (158)
Protein processing and modification (23)
Protein degradation (22)
Regulation and Cell signaling (39)
Regulation and Cell signaling - no subcategory (29)
Signal transduction in Eukaryotes (0)
Quorum sensing and biofilm formation (0)
Proteolytic pathway (0)
Regulation of virulence (2)
Programmed Cell Death and Toxin-antitoxin Systems (8)
Secondary Metabolism (6)
Secondary Metabolism - no subcategory (0)
Lipid-derived mediators (0)
Plant Octadecanoids (0)
Bacterial cytostatics, differentiation factors and antibiotics (0)
Biosynthesis of phenylpropanoids (0)
Hydrocarbons (0)
Aromatic amino acids and derivatives (0)
UV-absorbing secondary metabolites (0)
Plant Alkaloids (0)
Biologically active compounds in metazoan cell defence and differentiation (0)
Plant Hormones (6)
DNA Metabolism (83)
DNA repair (64)
CRISPs (2)
DNA Metabolism - no subcategory (8)
DNA replication (6)
DNA recombination (0)
DNA uptake, competence (3)
Fatty Acids, Lipids, and Isoprenoids (78)
Phospholipids (1)
Triacylglycerols (1)
Fatty acids (36)
Fatty Acids, Lipids, and Isoprenoids - no subcategory (29)
Isoprenoids (11)
Dormancy and Sporulation (2)
Spore DNA protection (0)
Dormancy and Sporulation - no subcategory (2)
Respiration (90)
Biotin (36)
ATP synthases (10)
Electron accepting reactions (29)

Electron donating reactions (11)

Reverse electron transport (0)

Respiration - no subcategory (35)

Sodium Ion-Coupled Energetics (5)

Metabolism of Aromatic Compounds (39)

Peripheral pathways for catabolism of aromatic compounds (11)

Anaerobic degradation of aromatic compounds (0)

Metabolism of central aromatic intermediates (25)

Metabolism of Aromatic Compounds - no subcategory (3)

The number of each feature is summarized in parentheses.
