

a**Amino Acid Biosynthesis**

Cysteine biosynthesis, serine => cysteine(M00021)
 Tryptophan biosynthesis, chorismate => tryptophan(M00023)
 Threonine biosynthesis, aspartate => homoserine => threonine(M00018)
 Proline biosynthesis, glutamate => proline(M00015)
 Methionine biosynthesis, aspartate => homoserine => methionine(M00017)
 Serine biosynthesis, glycerate-3P => serine(M00020)
 Lysine biosynthesis, aspartate => lysine(M00016)
 Leucine biosynthesis, pyruvate => 2-oxoisovalerate => leucine(M00019)

Amino Acid Transport

D-Methionine transport system(M00238)
 Branched-chain amino acid transport system(M00237)
 Glutamate transport system(M00233)

Carbohydrate Metabolism

Uronic acid metabolism(M00061)
 Pectin degradation(M00081)
 Citrate cycle, second carbon oxidation(M00011)
 Ethylmalonyl pathway(M00373)
 PRPP biosynthesis, ribose 5P => PRPP(M00005)
 Entner-Doudoroff pathway, glucose-6P => glyceraldehyde-3P + pyruvate(M00008)
 Citrate cycle, first carbon oxidation(M00010)
 Glycolysis, core module involving three-carbon compounds(M00002)
 Glycolysis (Embden-Meyerhof pathway), glucose => pyruvate(M00001)
 Pentose phosphate pathway, oxidative phase, glucose 6P => ribulose 5P(M00006)
 Pentose phosphate pathway (Pentose phosphate cycle)(M00004)

Vitamins Biosynthesis

Menaquinone biosynthesis, chorismate => menaquinone(M00116)
 Pantothenate biosynthesis, valine/L-aspartate => pantothenate(M00119)
 Riboflavin biosynthesis, GTP => riboflavin/FMN/FAD(M00125)
 Cobalamin biosynthesis, cobinamide => cobalamin(M00122)
 Biotin biosynthesis, pimeloyl-CoA => biotin(M00123)
 Thiamine biosynthesis, AIR => thiamine-P/thiamine-2P(M00127)
 Tetrahydrofolate biosynthesis, GTP => THF(M00126)

E1 VS E2

E1 VS E3

E2 VS E3



Reporter score

b