PURINE METABOLISM Alanine, aspartate and glutamate metabolism Pentose phosphate pathway Histidine metabolism Thiamine metabolism Ribosylamine-AICAR $\frac{1}{\nabla}$ D-Ribose-1P FGAM FGAR, CAIR —**⊭⊚**5-Amino-4-imidazolecarboxyamide K01756 K00759 <u>Ade</u>nylylsul<u>fate</u> PRPP SAICAR ^c**©**⁵Sulfate °**©**°L-Glutamine 5'-Acetylphosphoadenosine (mitochondria) 6.3.4.7 🎔 FAICAR K13988.. 3.6.1.20 5-Carboxyamino-1-(5-phospho-D-ribosyl)imidazole 3'-Phospho-adenylate 5'-Benzoylphosphoadenosine (mitochondria) _____ K02428 $\overline{\text{dIDP}}$ dIMP ADPnbose dITPK01120... Аррр**Қ©**™ K01522... 3.6.1.20 ADP 3'-Phosphoadenylyl-K04765 pppGpp Admylosulfate K01120... Inosine 5'-tetraphosphate succinate K01756 K01519 °**©**⁴ 3.6.1.14 3',5'-Cyclic GMP 🍑 2',3'-Cyclic AMP -C[®]ATP K04765 IDP Arginine biosynthesis ITP Adenosine 5'-tetraphosphate K00364 K00951... 3',5'-Cyclic 5 AMP K01510.. 3.6.1.14 5'-Butyrylphosphoinosine 3.6.1.20 ИѬ。ѽ K01511.. K01510... 3'-AMP(0136) GMP Riboflavin K00942 IMP O metabolism GDP K00944 RNA AMP K02428 ХррррХ K01081... K01119... Folate biosynthesis Gpppp@**_** K00760... 3.2.2.12 K00856 DNA **PO**99 dGTF DNA 🗪 K00759 **Xanthosine** Guanosine K01488... Inosine Adenosine K01241 2.7.4.11 K01519 K01129 3.2.2.2 K03783.. K00760... K00769... 2.4.2.15 K01239 Deoxyadenosine K01081.. K01239 K10213 Deoxyguanosine (*** K00759 K00904.. K03783... K01239 2.4.2.15 3.2.2.7 K01239 K10213 K00760... K03783... Guanine Xanthine K01488 Adenine K01119... Hypoxanthine 3'-GMP K03783... Urate-3-ribonucleoside 3.5.2.-Deoxymosine Formimino-5-Amino-4-imidazole Imidazolone K01119... glycine carboxylate Glycine Glycine, serine and threonine metabolism 5-Ureido-4-imidazole carboxylate Aminoimidazole 2',3'-Cyclic GMP - 5-Hydroxyisourate🍅¹ Carbamoyl phosphate Ureido-Ureidoglycine (S)-Allantoin CO2 glycolate 1.1.1.154 5-Hydroxy-2-oxo-4-ureido-2,5-dihydro-1H-imidazole-5-carboxylate 2.1.3.5 миantoate NH3[©]∰⁴ <u>spontaneous</u> Urea^c🍅

(R)-Allantoin

Glyoxylate and dicarboxylate metabolism

Glyoxylate

 CO_2

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