PYRIMIDINE METABOLISM PRPP Pentose phosphate pathway **6001**19 Dihydro-UDP-glucose(extracellular) K04765 K17828... Orotidine-5P orotate Orotate N-Carbamoyl K13421... K11540... ____C033744_ C00295 K13421.. Pseudouridine-2',3'-Cyclic ,UMP L-aspartate K04765 C00075 5'-phosphate UppppU 3'-UMP K01718 K00254 UTP (extracellular) K01518 K01511... K16328... C02355 Pseudouridine K11540... K16329... K00962 K01510... Carbamoyl-P UMP K17722.. K03040... UTP K13800... K00876 K00757 β-Alanine metabolism K00940... K01464 K09903 K01240 K00207 **↓**UDP Uridine 🖝 Uracil 3-Ureidoβ-Alanine Dihydrouracil K01510.. K11540... propionate K00761.. 3.6.1.39 K01494 K01519 Arginine biosynthesis Barbiturate, °**∲**L-Glutamine K01485 K01489 ⊢c**©**3CT<u>T</u> K04765 K01937 3.5.2.1 ► 🗢 3.5.1.95 1.1799.4 **₽**03 **▶••**©® Malonate (extracellular) 3-Oxo-3-ureido-K01510... K13800... K00756 K00876 propanoate ்**ு** Urea K03040... K00940... K10213 ▲Cytosine Cytidine 4 CTP 2',3'-Cyclic CMP CMP K01119... Ureidoacrylate 3.2.2.10 Alanine, aspartate and glutamate metabolism K09020 K01119... Thioredoxin Thioredoxin 2'-Deoxy-5-hydroxy-methylcytidine-<u>,-</u>₽€°©42 3'-CMP 5-Hydroxymethyl-Malonate-semialdehyde [°**Ç**°Carbamate 5'-triphosphate deoxycytidylate K00384 K00384 K00524... K00527 K16066 2.1.2.8 **→**** 2'-Deoxy-5-hydroxy-methylcytidine-5'-diphosphate K09018... ____ Thioredoxin K09019 3-Hydroxy-Thioredoxin Thioredoxin_ (Z)-3-Ureidoacrylate-(Z)-3-Peroxy-Aminoacrylate **L**C0342 dCMP disulfide disulfide àminoacrylate propionaté peracid K16904 K00893.. Deoxycytidine K13800... K01081 K00384 dCTP dCDP K16904 K01493 K01489 COOKS K09887 K00756 Thioredoxin disulfide K01494 K01519 K00757 K01520 K02335.. dUDP K03783... K00940.. K01081... K00758 3.6.1.39 dUTP Deoxyuridine 5-Methylbarbiturate Thioredoxin disulfide 1.1799.4 K03465 K00560.. K00384 K00524.. Methylmalonate K01485 ___C00342 5-Methylcytosine Thioredoxin | UDP K01081.. 3-Ureidoisobutyrate K17722.. K08728 Valine, leucine and K00940 DNA°© isoleucine metabolism K00207 3-Amino-Thymidine Dihydro-thymine Thymine dTMP K01510.. isobutanoate 3.6.1.39 2-Deoxy-D-nbose-1P 00240 7/14/15 (c) Kanehisa Laboratories