PYRIMIDINE METABOLISM PRPP Pentose phosphate pathway **6001**19 Dihydro-UDP-glucose(extracellular) K17828... Orotidine-5P orotate Orotate N-Carbamoyl K13421... K11540... ____C00337 K00226 C00295 K13421.. Pseudouridine-2',3'-Cyclic UMP L-aspartate K04765 C00075 5'-phosphate UppppU 3'-UMP K01718 K00254 UTP (extracellular) K01518 K01511... K16328... - Pseudouridine <u>C(23</u>55 COO 68 K11540... K16329... K00962 Carbamoyl-P UMP K17722.. K03040... UTP K13800... K00757 K00876 β-Alanine metabolism K00940... K01464 K09903 K01240 K01081. K00207 **↓**UDP ♣ Uridine 👉 Uracil 3-Ureidoβ-Alanine Dihydrouracil K11540... propionate K00761.. 3.6.1.39 K01494 K01519 Arginine biosynthesis Barbiturate, °**∲**L-Glutamine K01485 K01489 <u>-</u>cos³CT₽ K04765 K01937 3.5.2.1 ► 🗢 3.5.1.95 1.1799.4 **₽**03 **▶••**©® Malonate (extracellular) 3-Oxo-3-ureido-K13800... K00756 K00876 propanoate ்**ு** Urea K03040... K00940... K10213 ▲Cytosine Cytidine 4 CTP 2',3'-Cyclic CMP K01111 Ureidoacrylate 3.2.2.10 Alanine, aspartate and glutamate metabolism K09020 Thioredoxin Thioredoxin 2'-Deoxy-5-hydroxy-methylcytidine-3'-CMP <u>,-</u>₽€°©42 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 ___CO342_ dCMP disulfide disulfide àminoacrylate propionaté peracid K16904 K00893.. **Deoxycytidine** K13800... K01081. K00384 K00527 dCTP dCDP K16904 K01493 K01489 COOKS K09887 K00756 Thioredoxin disulfide K01494 K01519 K00757 K01520 K02335.. dUDP K03783... K00940.. K00758 3.6.1.39 dUTP Deoxyuridine 5-Methylbarbiturate Thioredoxin disulfide 1.1799.4 ▶○ 3.5.2.1 ▶○ K00560.. K00384 K00524.. K03465 Methylmalonate K01485 ___C00342 5-Methylcytosine Thioredoxin | UDP K01081.. 3-Ureidoisobutyrate K17722.. K08728 Valine, leucine and K00940 DNA°© isoleucine metabolism K00758 K00207 3-Amino-Thymidine Dihydro-thymine Thymine dTMP isobutanoate 3.6.1.39 2-Deoxy-D-nbose-1P 00240 7/14/15 (c) Kanehisa Laboratories