PYRIMIDINE METABOLISM PRPP Pentose phosphate pathway **6000**19 Dihydro-⊥o∘UDP-glucose (extracellular) K17828... 3.6.1.8 Orotidine-5P orofate N-Carbamoyl PMT_1402 K00226 Pseudouridine-5'-phosphate 2',3'-Cyclic UMP L-aspartate 3.6.1.8 UppppU PMT_2094 3'-UMF UTP K01518 K01511... O Pseudouridine (extracellular) PMT_1377 K01119... K01510... Carbamoyl-P UMP ♥ UTP K13800... K17722... PMT_1442... K00876 PMT_2148 β-Alanine metabolism **FO** PMT_1244 K01240 **▲** UDP 3-Ureidoβ-Alanine Uridine Dihydrouracil K01510... PMT_0653... propionate PMT_0558... 3.6.1.39 PMT_1828 Arginine Barbiturate Malonate -Glutamine K01513... biosynthesis | 1.1799.4|**--▶°⊙≪** PMT_2219 (extracellular) 3-Oxo-3-ureido-K01513... propanoate PMT_0326 **Ò**°Urea K01510. 3.6.1.8 Ureidoacrylate ₩ RNA K01510... K13800.. Alanine, aspartate and ytosine K00876 K09020 PMT_1442... glutamate metabolism PMT_0366 PMT_2148 PMT_1689 K10213 ▲ CDP CTP Cytidine • Carbamate Malonate-PMT_1377 3.2.2.10 semialdehyde Thioredoxin Thioredoxin K01119... K01119.. Thioredoxin 3-Hydroxy-(Z)-3-Peroxy-(Z)-3-Ureidoacrylate-Aminoacrylate ___C(O342_ 3'-CMP 2',3'-Cyclic CMP PMT_079 àminoacrylate propionate hm5dCDP hm5dCTP peracid K19797 PMT_1551 K00527 Thioredoxin Thioredoxin disulfide hm5dCMP K18942 <u>disulfi</u>de K13800... dCMP CON-4 PMT_2148 K00893... **P**Deoxycytidine Thioredoxin PMT_1689 dCTP Ò dCDP disulfide hm5C in DNA K16904 PMT_0366 K16904 K08722 K01489 K09887 K00756 PMT_1828 K01493 PMT_0001. K01520 K00757 Deoxyuridine 🛶 K03783... K00857 PMT_1990 K00758 3.6.1.39 dUMP **⊙**°Urea dUTP PMT 0366 Thioredoxin disulfide 5-Methylbarbiturate K08722 | 1.1799.4|**--▶°0*4**-K00560.. PMT_1550 PMT_1551 PMT_0793 C(276_ PMT_0326 3-Oxo-3-ureido-isobutyrate Methylmalonate 5-Methylcytosine PMT_0366 Thioredoxin@UDP K08722 K08728 Valine, leucine and PMT_2148 PMT_0001. K00857 DNACONisoleucine metabolism K01510.. K00758 K00207 Thymidine ♣ dTMP (R)-3-Amino-isobutyrate (R)-Dihydro-(R)-3-Ureido-Thymine K01510.. isobutyrate thymine 3.6.1.39 2-Deoxy-D-nbose-1P K01513... 00240 12/6/16 (c) Kanehisa Laboratories