PYRIMIDINE METABOLISM PRPP Pentose phosphate pathway Dihydro-orotate ⊆**©**UDP-glucose (extracellular) K04765 Orotidine-5P Orotate N-Carbamoyl K00226 Pseudouridine-2',3'-Cyclic UMP L-aspartate 5'-phosphate Մբբբր 3'-UMP UTP Pseudouridine K01511. (extracellular) K01510... Carbamoyl-P ₩UMP UTP β-Alanine metabolism K01240 **▲** UDP K01081... 3-Ureido-propionate Uracil Uridine β-Alanine Dihydrouracil 3.6.1.39 Arginine biosynthesis K01519 Malonate ்**ு**L-Glutamine Barbiturate K01489 _CTP K04765 1.1799.4 **F@4** (extracellular) 3-Oxo-3-ureido-**T**RNA propanoate K01510... c**ॐ**⁰Urea K10213 Cytidine 4 CTP 2',3'-Cyclic CMP K01119... Ureidoacrylate 3.2.2.10 Alanine, aspartate and glutamate metabolism Thioredoxin Thioredoxin 3'-CMP hm5dCDP 💇 Carbamate hm5dCTP Malonatesemialdehyde <u>_____</u> hm5dCMP Thioredoxin Thioredoxin 3-Hydroxy-(Z)-3-Peroxy-aminoacrylate Thioredoxin disulfide (Z)-3-Ureidoacrylate-Aminoacrylate dCMP propionate peracid Deoxycytidine dCTP| dCDP K01081... hm5C in DNA C00434 K01489 Thioredoxin K00756 disulfide K01519 K00757 Deoxyuridine dUDP K03783... K00943 K00758 3.6.1.39 dUMP °**ॐ**6Urea dUTP K01081... Thioredoxin disulfide 5-Methylbarbiturate 1.1799.4 K00560... K03465 3-Oxo-3-ureido-isobutyrate Methylmalonate 5-Methylcytosine -<u>-</u>C⁰12 K01081... Thioredoxin UDP Valine, leucine and isoleucine metabolism K01510... K00758 dTMP Thymidine (R)-3-Ureido-isobutyrate (R)-3-Amino-isobutyrate Thymine (R)-Dihydro-K01510.. thymine 3.6.1.39 2-Deoxy-D-nbose-1P 00240 3/25/16 (c) Kanehisa Laboratories