## TERPENOID BACKBONE BIOSYNTHESIS Glycolysis :X:D-Glyceraldehyde 3-phosphate Acetyl-Co&🂝◀ pyruvatê©° Mevalonate pathway MEP/DOXP pathway 5-phosphate **™**Acetoacetyl-CoA K01641 2-C-Methyl-D-erythritol 4-phosphate 3-Hydroxy-3-methyl-glutaryl-CoA c 4-(Cytidine 5'-diphospho)-2-C-methyl-D-erythritol K00054 K00021 K00919 2-Phospho-4-(cytidine 5'-diphospho)-2-C-methyl-D-erythritol 🌣 Mevalonate K18689 K01770.. cos2-C-Methyl-D-erythritol Mevalonate-3₽�<sup>47</sup> $^{2}\mathbf{\Phi}^{7}$ Mevalonate-5P 2,4-cyclodiphosphate K18690 K03526 1-Hydroxy-2-methyl-K17942 Mevalonate-3,5PP°♥\* 2-butenyl 4-diphosphate Mevalonate-5PP Isopentenyl-P Dimethylallyl-PP 2.5.1.20 04 K12742 K01823 **⊭**©Isoprene Rubber Isopentenyl-PP Zeatin biosynthesis (Z,Z)-Farnesyl-PP Sesquiterpenoid and triterpenoid biosynthesis Monoterpenoid biosynthesis Geranyl-PP Decaprenyl-PF® 2.5.1.88 Polypreny-PP 🗪 (Z,E)-Famesyl-PP Diterpenoid biosynthesis (E,E)-Famesyl-P Farnesal trans-Farnesol Carotenoid biosynthesis (E,E)-Farnesyl-PP Indole diterpene alkaloid biosynthesis K15890... K15793 Geranyl geranyl-PP Steroid biosynthesis Farnesyl cysteine K05355 K15889 K05355 Protein C-terminal S-farnesyl-L-cysteine methyl ester Hexaprenyl-PP S-famesyl protein Protein C-terminal S-farnesyl-L-cysteine Nona-prenyl-PP Phytyl-PP tritrans,heptacis-Undecaprenyl-PP Carotenoid biosynthesis Heptaprenyl-PP N-Glycan biosynthesis Dehydro dolichol-PP Dolichol-PP Octaprenyl-PP Ubiquinone and other terpenoid-quinone biosynthesis COTTA C1032 di-trans,poly-cis-Undecaprenyl-PP Decaprenyl-PP 00900 4/18/16 (c) Kanehisa Laboratories