PEPTIDOGLYCAN BIOSYNTHESIS Aminosugar metabolism UDP-N-acetylglucosamine enolpyruvate °🌣⁰UDP-N-acetylmuramate 🛡 UDP-MurNAc-L-Ala ' UDP-MurNAc-L-Ala-D-Glu OD-Alanine D-Alanine K05362 metabolism UDP-MurNAc-L-Ala-y-D-Glu-UDP_MurNAc-L-Alaco meso-2,6- diaminopimelate y-D-Glu-L-Lys 🔁 🌉 :D-Ala-D-Ala Undecaprenol 🌣 K00887 ♦ UDP-MurNAc-L-Ala-y-D-Glu-UDP-MurNAc-L-Ala-°©°meso-2,6-diaminopimeloyl-_ | D-Ala-D-Ala y-D-Glu-L-Lys-D-Ala-D-Ala Undecaprenyl-P. Pf©4 **₽**©UMP UMP®# ♥ Und-PP-MurNAc-L-Ala°♥%-D-Glu-meso-2,6-diaminopimeloylD-Ala-D-Ala Und-PP-MurNAc-L-Ala- y-D-Glu-L-Lys-D-Ala-D-Ala Undecapreny-PF 🍄 OUDP-GlcNAc UDP-GlcNAc[™] Und-PP-MurNAc-Und-PP-MurNAc-(GlcNAc)-(GlcNAc)- L-Ala-y-D-Glu-∞ L-Lys-D-Ala-D-Ala 2,6-diaminopimeloyl-D-Ala-D-Ala Und-PP-MurNAc-(GlcNAc)- L-Ala-D-isoglutaminylc L-Lys-D-Ala-D-Ala K11693 K05363 Und-PP-MurNAc-(GlcNAc)-Und-PP-MurNAc-(GlcNAc)-L-Ala-D-isoglutaminyl-L-Lyse L-Ala-y-D-Glu-L-Lys-(L-Ala)-D-Ala-D-Ala (Gfy)-D-Alá-D-Alá K11694 K12554 Und-PP-MurNAc-(GlcNAc)- ▼ L-Ala-D-isoglutaminyl-L-Lys-©² (Gly)3-D-Ala-D-Ala Und-PP-MurNAc-(GlcNAc)-L-Ala-y-D-Glu-L-Lys-(L-Ala)2-D-Ala-D-Ala flippase Und-PP-MurNAc-(GlcNAc)-L-Ala-D-isoglutaminyl-L-Lys- 65 (Gfy)5-D-Ala-D-Ala K04478 K03814 K05364 K07258 D-Alanine 🗪 D-Alanine 🗪 📭 D-Alanine Peptidoglycan Peptidoglycan Peptidoglycan 00550 5/28/15 (c) Kanehisa Laboratories