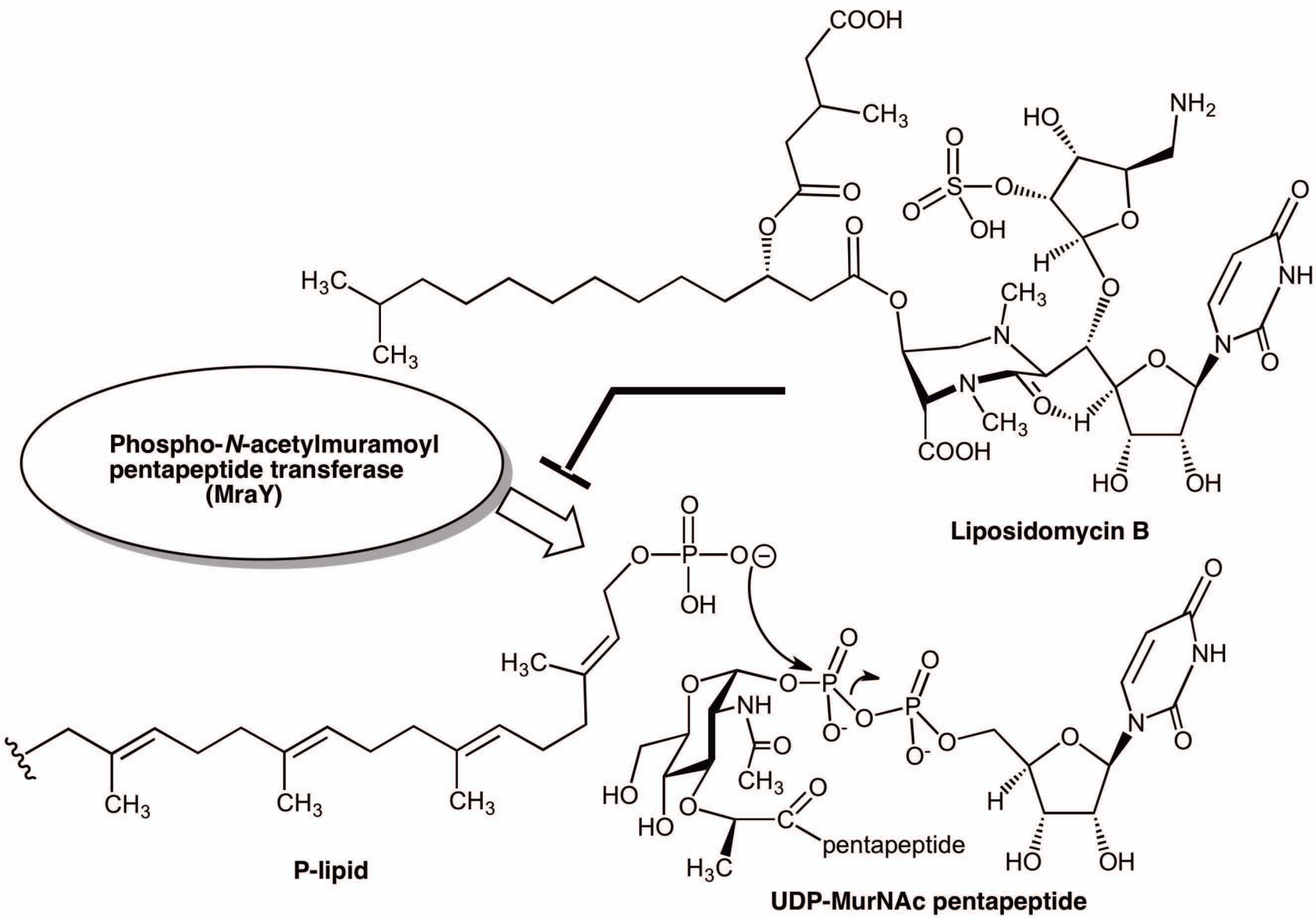




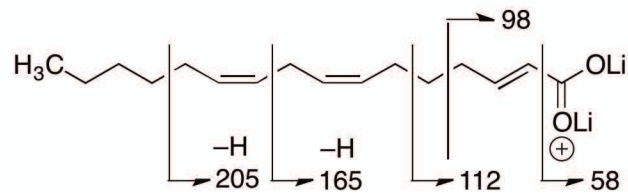
Title	The logic of biologically active small molecules : amazing ability of microorganisms
Author(s)	Ubukata, Makoto
Citation	Bioscience, biotechnology, and biochemistry, 82(7), 1063-1072 https://doi.org/10.1080/09168451.2018.1451740
Issue Date	2018-03-21
Doc URL	https://hdl.handle.net/2115/73224
Rights	This is an Accepted Manuscript of an article published by Taylor & Francis in Bioscience, Biotechnology, and Biochemistry on 21 Mar 2018, available online: https://doi.org/10.1080/09168451.2018.1451740
Type	journal article
File Information	BBBReview2018_Fig.1A.B. Fig.2. Fig.3. Fig.4. Fig.5_Ne_New.pdf



a

b

Determination of diene double bond positions in the lipid moiety of liposidomycin A by *in situ* Charge-Remote Fragmentation



Collision-induced dissociation of the dilithiated ion, m/z 263

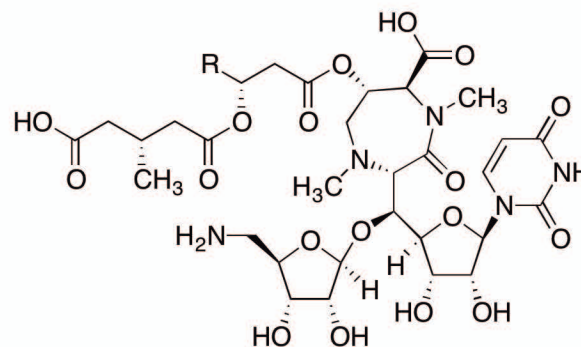
1) 35 mM LiOH, 5h, 37 °C,
then 0.25 M NH₄OAc

2) Speed-Vac, H₂O, glycerol,
then FAB-MS/MS

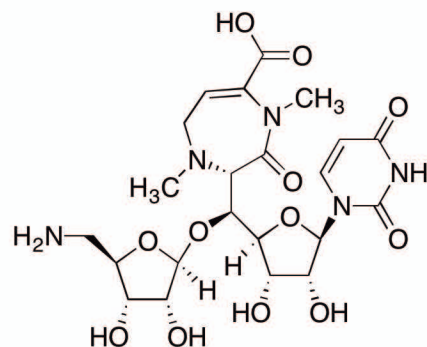
Liposidomycin A: R =

Liposidomycin B: R =

Liposidomycin C: R =

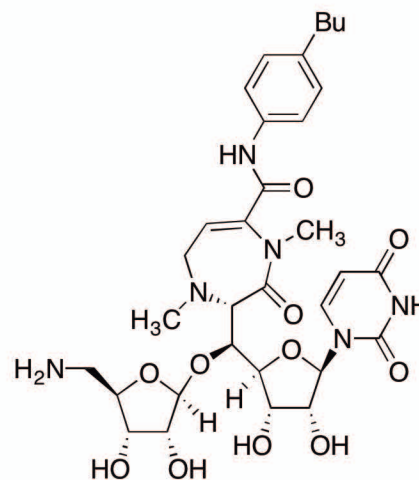


35 mM NaOH,
4h, 37 °C



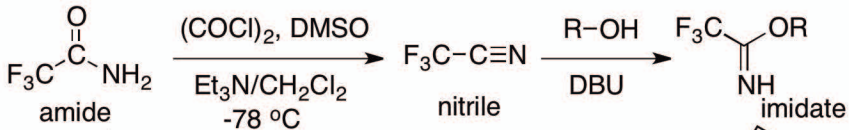
Anhydrodeacylliposidomycin

Ref. 26



CPZEN-45

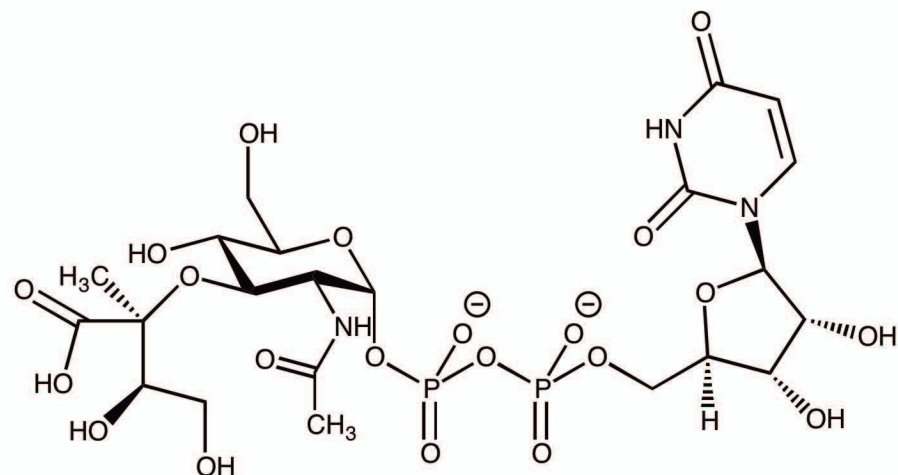
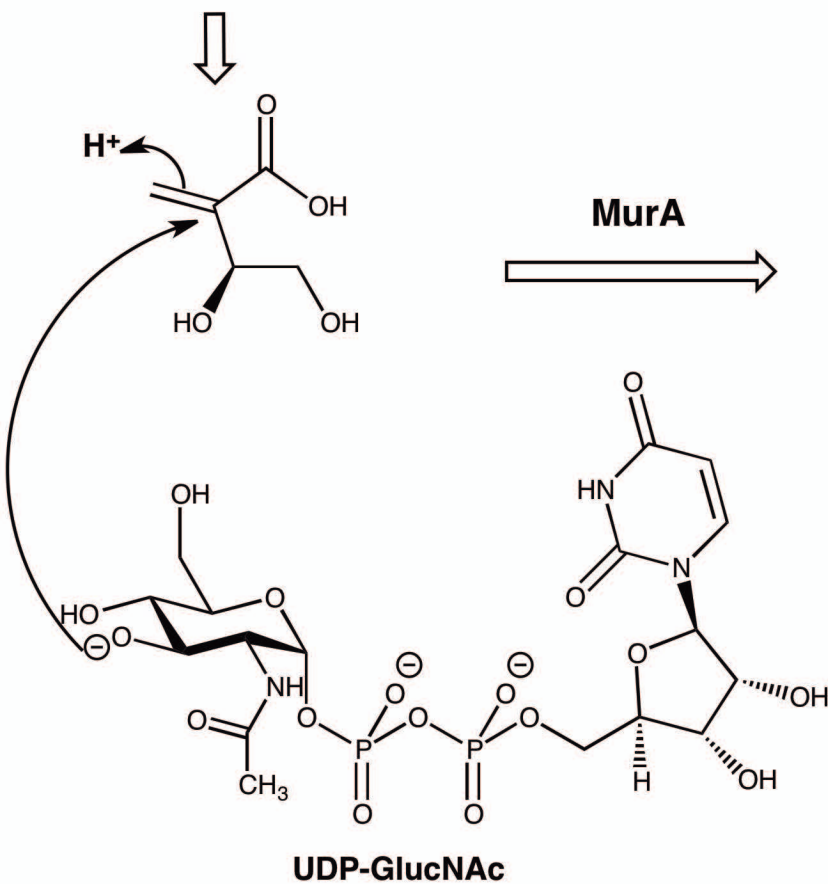
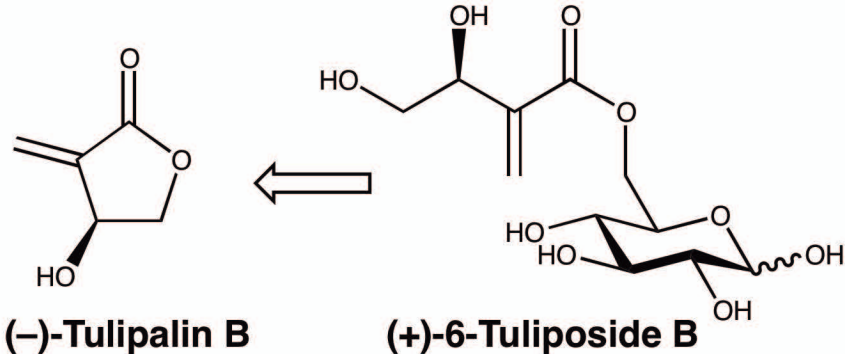
Therapeutic option for
M. tuberculosis in a
dormant state



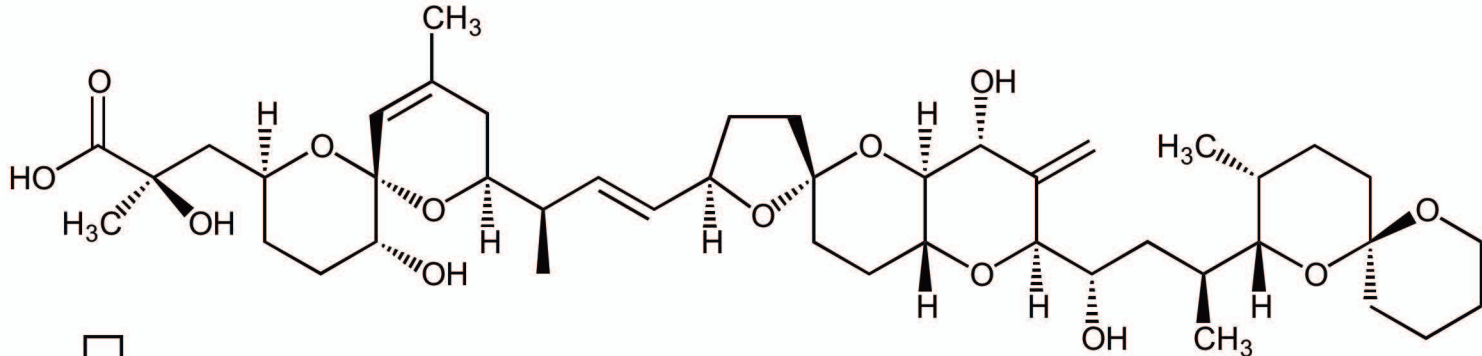
Synthetic Study of
Epiderstatin

Stereochemistry of
Liposidmycin

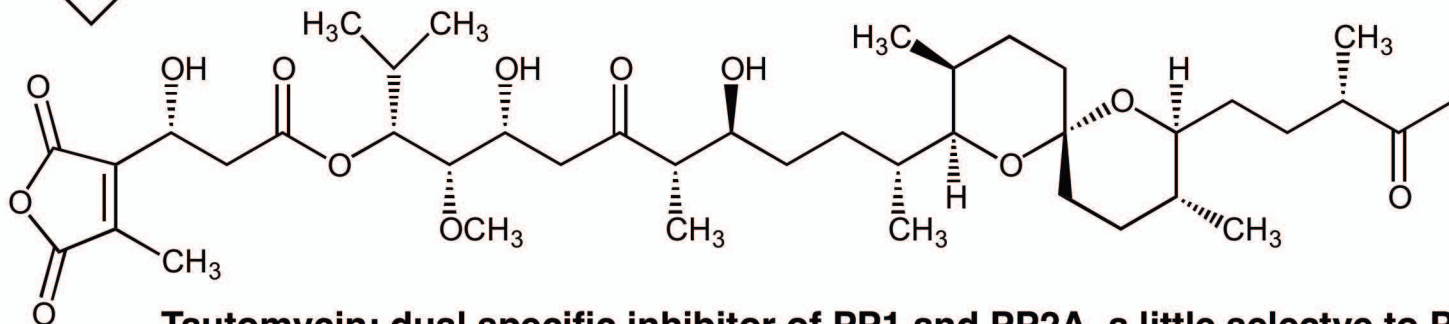
Chemical Biology using
Natural Products



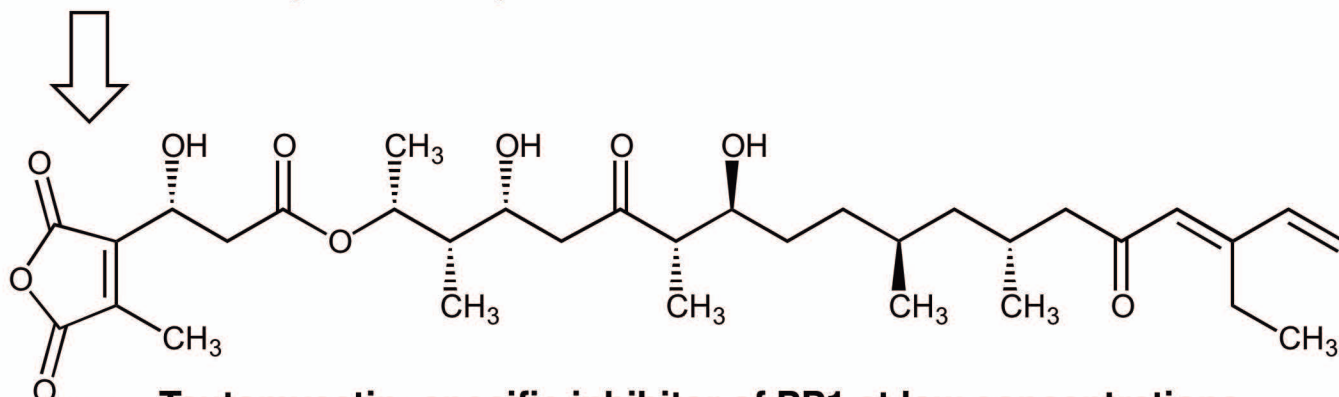
Putative UDP-GlcNAc-tulipalin B adduct inhibits the growth of MurA-overexpressing *E. coli* which shows resistance to fosfomycin.



Okadaic acid: specific inhibitor of PP2A at low concentrations



Tautomycin: dual specific inhibitor of PP1 and PP2A, a little selective to PP1



Tautomycetin: specific inhibitor of PP1 at low concentrations

Development of PP1-targeted therapeutics

α -Proteobacterial strain *Spingopyxis* sp. GF9

