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Synthesis of D-alanylated wall teichoic acids from *staphylococcus aureus*

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Synthesis of D-alanylated wall teichoic acids from *Staphylococcus aureus*

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List of abbreviations

Ac - acetyl
Ac₂O - acetic anhydride
ACN - acetonitrile
AgOtf - Silver triflate
Ala - alanine
Aq - aqueous
ASPS - automated solid phase synthesis
Bn - benzyl
BnBr - benzyl bromide
Boc - tert-butyloxycarbonyl
BSA - bovine serum albumin
CAMP - cationic antimicrobial peptides
CAN - cerium ammonium nitrate
Cbz - carbobenzyloxy
CDP - cytidine diphosphate
CMP - cytidine monophosphate
CNE - cyanoethyl
CPG - controlled pore glass
CSA - camphorsulfonic acid
CSO - using (1S)-(+)-(10-camphorsulfonyl)-oxaziridine
DCA - dichloroacetic acid
DCC - dicyclohexylcarbodiimide
DCI - *N,N'*-diisopropylcarbodiimide
DCM - dichloromethane
DDQ - 2,3-dichloro-5,6-dicyano-1,4-benzoquinone
DIC - diisopropylcarbodiimide
DMF - dimethylformamide
DMSO - dimethyl sulfoxide
DMTr - 4,4'-dimethoxytrityl
Eq - equivalent
Et₂O - diethyl ether
EtOAc - ethyl acetate
EtOH - ethanol
ETT - ethylthiotetrazole
FITC - fluorescein isothiocyanate
GlcNAc - *N*-acetylglucosamine
GlcNAc-1P - *N*-acetylglucosamine-1-phosphate

GroP - glycerol phosphate
HFIP - hexafluoroisopropanol
HPLC - high-performance liquid chromatography
IgG - immunoglobulin G
I-Pr - isopropyl
LTa - lipoteichoic acid
ManNAc - *N*-acetylmannosamine
Me - methyl
MeOH - methanol
MP – methoxy phenyl
MRSA - methicillin-resistant *Staphylococcus aureus*
MS – molecular sieves
NaH - sodium hydride
NaOMe - sodium methoxide
NIS - *N*-iodosuccinimide
NMI - *N*-methylimidazole
NMR - nuclear magnetic resonance
ON - overnight
PG - peptidoglycan
Ph - phenyl
Phth - phthaloyl
PMB - *p*-methoxybenzyl
PTSA - *p*-toluenesulfonic acid
PyBop - benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate
Pyr - pyridine
RboP - ribitol phosphate
RT - room temperature
Sat - saturated
SEt - ethylsulfanyl
Sn - stereospecific numbering
STD-NMR - Saturation Transfer Difference Nuclear Magnetic Resonance
TA - teichoic acid
Tar - teichoic acid ribitol
TBAF - tetra-*n*-butylammonium fluoride
TBDMS - *t*-butyldimethylsilyl
TBDPS - *t*-butyldiphenylsilyl
TCA - trichloroacetic acid
TEA - triethylamine
Tf₂O - trifluoromethanesulfonic anhydride

TFA - trifluoroacetic acid

TFOH - trifluoroacetic acid

THF - tetrahydrofuran

TLR - toll-like receptor

Trt - trityl

UDP - uridine diphosphate

WTA - wall teichoic ac