

Product Name:	Tedizolid Phosphate
Product Number:	T118
CAS Number:	856867-55-5
Molecular Formula:	$C_{17}H_{16}FN_6O_6P$
Molecular Weight:	450.32 g/mol
Form:	Powder
Appearance:	White to off-white powder
Solubility:	Soluble in DMSO (36 mg/mL), sparingly soluble in water (0.1 mg/mL)
Source:	Synthetic
Storage Conditions:	-20C
Description:	Tedizolid Phosphate is an oxazolidone antibiotic. It is a phosphate ester prodrug of Tedizolid, the active compound. It is bacteriostatic against Gram-positive organisms.
Mechanism of Action:	Tedizolid binds to the 23S rRNA of the 50S ribosomal subunit, preventing the formation of the 70S initiation complex and inhibiting protein synthesis.
Spectrum:	Effective against Gram-positive bacteria including MRSA and VRE, and linezolid-resistant strains
Microbiology Applications	Tedizolid inhibited all 28 isolates of penicillin-resistant <i>Streptococcus pneumoniae</i> using an in vitro mouse model with 0.25 µg/mL, which was 4-fold more potent than Linezolid (Choi et al, 2012).
References:	Choi S, Im W, and Bartizal K (2012) Activity of tedizolid phosphate (TR-701) in murine models of infection with penicillin-resistant and penicillin-sensitive <i>Streptococcus pneumoniae</i> . Antimicrob Agents Chemother. 2012 Sep;56(9):4713-7 PMID 22713339 Kishen JJ, Mansour H, Unger NR, Childs LM (2014) Tedizolid: a new oxazolidinone antimicrobial. Am. J. Health Syst. Pharm. 71(8):621-33 PMID 24688035 Rybak JM, Marx K, Martin CA (2014) Early experience with tedizolid: Clinical efficacy, pharmacodynamics, and resistance. Pharmacother. 34(11):1198-208 PMID 25266820