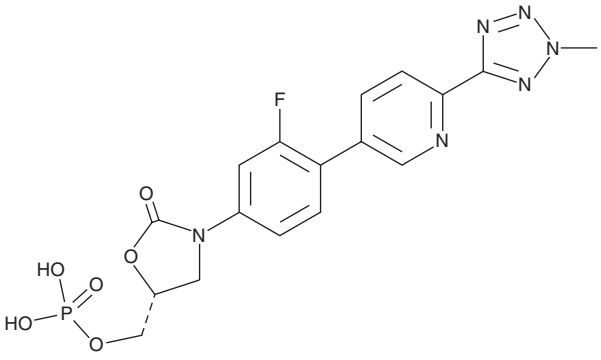
PRODUCT INFORMATION

Tedizolid Phosphate

Item No. 23729

CAS Registry No.:	856867-55-5
Formal Name:	(5R)-3-[3-fluoro-4-[6-(2-methyl-2H-tetrazol-5-yl)-3-pyridinyl]phenyl]-5-[(phosphonooxy)methyl]-2-oxazolidinone
Synonym:	TR 701 FA
MF:	$C_{17}H_{16}FN_6O_6P$
FW:	450.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 300 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tedizolid phosphate is supplied as a crystalline solid. Aqueous solutions of tedizolid phosphate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of tedizolid phosphate in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Tedizolid phosphate is a prodrug form of tedizolid, an antibiotic with activity against Gram-positive bacteria.[1] Tedizolid phosphate is rapidly converted by non-specific phosphatases to tedizolid, which inhibits the growth of *S. aureus*, *S. epidermidis*, *E. faecalis*, *E. faecium*, *S. pneumoniae*, and *S. pyogenes* (MICs = 0.25-1 µg/ml). *In vivo*, tedizolid phosphate (15 mg/kg) reduces vegetation titer in a rabbit model of aortic valve endocarditis caused by methicillin-resistant *S. aureus* (MRSA).[2] It also reduces densities of methicillin-susceptible *S. aureus* and MRSA infection in a mouse model of catheter-related biofilm infection and increases survival in a rabbit model of MRSA necrotizing pneumonia.[3,4]

References

1. Ong, V., Flanagan, S., Fang, E., *et al.* Absorption, distribution, metabolism, and excretion of the novel antibacterial prodrug tedizolid phosphate. *Drug Metab. Dispos.* **42(8)**, 1275-1284 (2014).
2. Chan, L.C., Basuino, L., Dip, E.C., *et al*. Comparative efficacies of tedizolid phosphate, vancomycin, and daptomycin in a rabbit model of methicillin-resistant *Staphylococcus aureus* endocarditis. *Antimicrob. Agents Chemother.* **59(6)**, 3252-3256 (2015).
3. Bayer, A.S., Abdelhady, W., Li, L., *et al.* Comparative efficacies of tedizolid phosphate, linezolid, and vancomycin in a murine model of subcutaneous catheter-related biofilm infection due to methicillin-susceptible and -resistant *Staphylococcus aureus*. *Antimicrob. Agents Chemother.* **60(8)**, 5092-5096 (2016).
4. Le, V.T.M., Le, H.N., Pinheiro, M.G., *et al.* Effects of tedizolid phosphate on survival outcomes and suppression of production of staphylococcal toxins in a rabbit model of methicillin-resistant *Staphylococcus aureus* necrotizing pneumonia. *Antimicrob. Agents Chemother.* **61(4)**, e02734-16 (2017).

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