

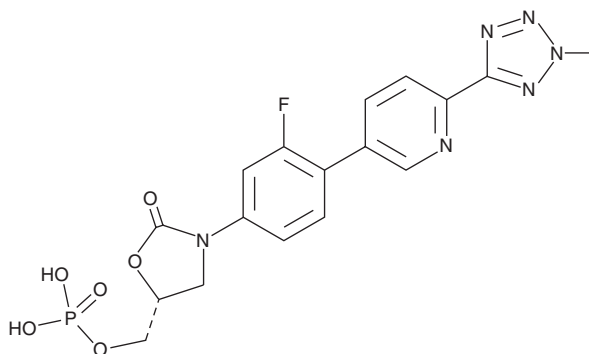
PRODUCT INFORMATION



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-[(phosphonoxy)methyl]-2-oxazolidinone
Synonym: TR 701 FA
MF: C₁₇H₁₆FN₆O₆P
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).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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