



LKT Laboratories, Inc.

Linezolid

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Product Information

Product ID L3453

CAS No. 165800-03-3

Chemical Name

Synonym N-[[[(5S)-3-[3-Fluoro-4-(4-morpholinyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide

Formula C₁₆H₂₀FN₃O₄

Formula Wt. 337.35

Melting Point 178-182C

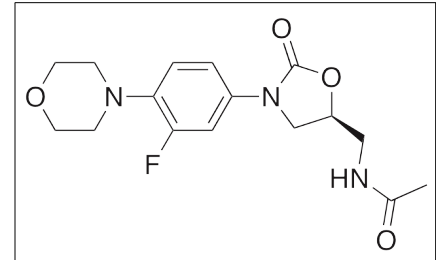
Purity ≥98%

Solubility Moderately soluble in water (3 mg/mL). Soluble in DMSO (>20 mg/mL).

Store Temp Ambient

Ship Temp Ambient

Description Linezolid is an oxazolidinone antibiotic that exhibits antibacterial activity against gram positive bacteria. Linezolid binds to the A site of 23S rRNA on the 50S ribosomal subunit, inhibiting protein synthesis. Linezolid also decreases NMDA receptor-mediated current, but is less active than most other comparable antibacterial compounds.



Bulk quantities available upon request

Product ID	Size
L3453	100 mg
L3453	1 g
L3453	5 g
L3453	25 g

References Long KS, Vester B. Resistance to linezolid caused by modifications at its binding site on the ribosome. *Antimicrob Agents Chemother.* 2012 Feb;56(2):603-12. PMID: 22143525.

Kombian SB, Phillips OA. In vitro electrophysiological investigations of the acute effects of linezolid and novel oxazolidinones on central nervous system neurons. *Neuroscience.* 2011 Apr 28;180:53-63. PMID: 21296129.

Ippolito JA, Kanyo ZF, Wang D, et al. Crystal structure of the oxazolidinone antibiotic linezolid bound to the 50S ribosomal subunit. *J Med Chem.* 2008 Jun 26;51(12):3353-6. PMID: 18494460.

Brickner SJ, Hutchinson DK, Barbachyn MR, et.al. Synthesis and antibacterial activity of U-100592 and U-100766, two oxazolidinone antibacterial agents for the potential treatment of multidrug-resistant gram-positive bacterial infections. *J Med Chem.* 1996 Feb 2;39(3):673-9. PMID: 8576909 DOI: 10.1021/jm9509556

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.