LKT Laboratories, Inc.

Linezolid

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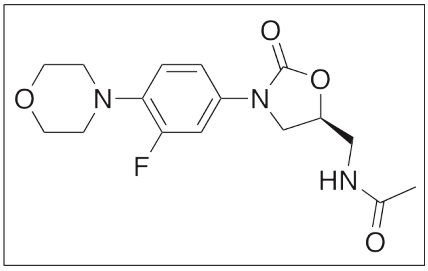
Product Information

Product ID L3453
CAS No. 165800-03-3
Chemical Name (S)-N-((3-(3-fluoro-4-morpholinophenyl)-2-oxooxazolidin-5-yl)methyl) acetamide
Synonym Zyvox, Zyvoxid



Formula $C_{16}H_{20}FN_3O_4$
Formula Wt. 337.35
Melting Point 178-182C
Purity ≥99%
Solubility Moderately soluble in water (3 mg/mL). Soluble in DMSO (>20 mg/mL).

Store Temp Ambient
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
L3453	100 mg	$55.70
L3453	1 g	$147.80
L3453	5 g	$380.50
L3453	25 g	$869.30

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.

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

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