

Product Name: Linezolid

Catalog No.: 3765

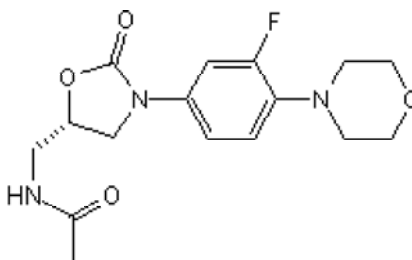
Batch No.: 1

CAS Number: 165800-03-3

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₀FN₃O₄
Batch Molecular Weight: 337.35
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 25 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -12.2 (Concentration = 0.9, Solvent = Chloroform)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	56.97	5.98	12.46
Found	57.13	6.04	12.44

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Linezolid

Catalog No.: 3765

Batch No.: 1

CAS Number: 165800-03-3

IUPAC Name: *N*-[[[(5*S*)-3-[3-Fluoro-4-(4-morpholinyl)phenyl]-2-oxo-5-oxazolidinyl]methyl]-acetamide

Description:

Oxazolidinone antibiotic. Inhibits bacterial protein synthesis prior to chain initiation. Displays potent antibacterial activity against a variety of multidrug-resistant gram-positive microbes in vitro and in vivo. Identified as targeting human host cell proteins that interact with SARS-CoV-2.

Physical and Chemical Properties:

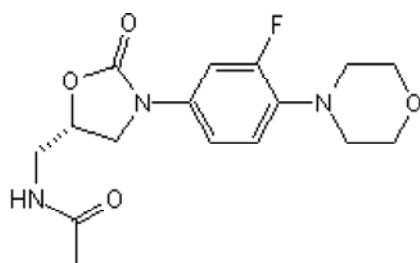
Batch Molecular Formula: C₁₆H₂₀FN₃O₄

Batch Molecular Weight: 337.35

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Gordon et al (2020) A SARS-CoV-2-human protein-protein interaction map reveals drug targets and potential drug-repurposing. *BioRxiv* - Paper not yet peer reviewed.

Brickner et al (2008) Linezolid (ZYVOX), the first member of a completely new class of antibacterial agents for treatment of serious gram-positive infections. *J.Med.Chem.* **51** 1981. PMID: 18338841.

Brickner et al (1996) Synthesis and antibacterial activity of U-100592 and U-100766, two oxazolidinone antibacterial agents for the potential treatment of multi-drug-resistant gram-positive bacterial infections. *J.Med.Chem.* **39** 673. PMID: 8576909.

Ford et al (1996) In vivo activities of U-100592 and U-100766, novel oxazolidinone antimicrobial agents, against experimental bacterial infections. *Antimicrob.Agents Chemother.* **40** 1508. PMID: 8726028.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956