Product Data Sheet

Tedizolid

Cat. No.:	A3863
CAS No.:	856866-72-3
Formula:	C17H15FN6O3
M.Wt:	370.34
Synonyms:	TR-700; DA-7157; Torezolid; TR 700; DA 7157
Target:	Microbiology & Virology
Pathway:	Antibiotic
Storage:	Store at -20°C

Solvent & Solubility

insoluble in EtOH; insoluble in H2O; ⩾9.25 mg/mL in DMSO with gentle warming

In Vitro — Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.7002 mL	13.5011 mL	27.0022 mL
5 mM	0.5400 mL	2.7002 mL	5.4004 mL
10 mM	0.2700 mL	1.3501 mL	2.7002 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Oxazolidinone for gram-positive infections
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	PRSP (penicillin G MICs⩾2 μg/ml) clinical isolates
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.
Reacting conditions:	20h; MIC90=0.25 μM

	Applications:	Agar dilution experiments demonstrated that all 28 clinical isolates of PRSP were inhibited by tedizolid at 0.25 μg/ml (MIC range, 0.125 to 0.25 μg/ml) and all were inhibited by linezolid at 1μg/ml (MIC range, 0.125 to 1 μg/ml). Tedizolid was 4-fold more potent than linezolid against PRSP; MIC90s were 0.25 μg/ml with tedizolid and 1 μg/ml with linezolid.
In Vivo	**Animal experiment**	
	Animal models:	Male ICR mice
	Dosage form:	10 mg/kg (QD); intraperitoneal inoculation
	Applications:	The majority (80%) of the untreated control mice infected with PSSP type III succumbed to the infection within 7 days. For infected mice receiving 48 h treatment with tedizolid phosphate at 2.5 mg/kg QD and 5 mg/kg QD (total daily doses, 2.5 mg/kg and 5 mg/kg, respectively), the 15-day cumulative survival rates were 50% and 80%, respectively. A 100% survival rate was achieved with tedizolid phosphate at a minimum total daily dose of 10 mg/kg (QD), which was 4-fold lower than the 40-mg/kg total daily dose of linezolid (BID) needed to obtain 100% survival. On the basis of the ED50 values in the murine pneumococcal pneumonia model, tedizolid phosphate was nearly 3-fold more potent than linezolid, with ED50s of 2.80 mg/kg/day (95% CI, 1.41 to 4.44) versus 8.09 mg/kg/day (95% CI, 4.74 to 11.91)
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Choi S, Im W, Bartizal K. Activity of Tedizolid Phosphate (TR-701) in murine models of infection with penicillin-resistant and penicillin-sensitive streptococcus pneumoniae[J]. Antimicrobial agents and chemotherapy, 2012, 56(9): 4713-4717.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable

under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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