

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



Product Data Sheet

Tedizolid phosphate

Cat. No.: HY-14855B CAS No.: 856867-55-5 Molecular Formula: $C_{17}H_{16}FN_{6}O_{6}P$

Molecular Weight: 450

Bacterial; Antibiotic Target:

Pathway: Anti-infection

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 2 years

> -20°C 1 year

SOLVENT & SOLUBILITY

DMSO : ≥ 36 mg/mL (80.00 mM) In Vitro

H₂O: 0.1 mg/mL (0.22 mM; Need ultrasonic)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2222 mL	11.1111 mL	22.2222 mL
	5 mM	0.4444 mL	2.2222 mL	4.4444 mL
	10 mM	0.2222 mL	1.1111 mL	2.2222 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.62 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.62 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Tedizolid phosphate (TR-701FA) is a novel oxazolidinone with activity against Gram-positive pathogens.	
IC ₅₀ & Target	Oxazolidinone	
In Vitro	Tedizolid phosphate (TR-701FA; 0.25 μg/mL) inhibits all 28 clinical isolates of PRSP, and is 4-fold more potent than linezolid	

	against PRSP ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	For mice infected with PSSP type III, the 100% survival rate is achieved with tedizolid phosphate (TR-701FA) at a minimum total daily dose of 10 mg/kg. Lungs of infected mice treated with tedizolid phosphate show less severe inflammation and edema, as indicated by the mean scores for inflammation and edema ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]

To induce a systemic S. pneumoniae infection, male ICR mice (weight, 18 to 20 g) are inoculated intraperitoneally with 1 of 4 PRSP isolates (DR9, DR10, DR11, or DR14) suspended in 10% mucin. The suspension contained sufficient bacteria to kill 100% of untreated control mice. At 1 h postinfection, mice receives a single dose of either tedizolid phosphate or linezolid, and survival is assessed daily for 7 days postinfection. Treatments are delivered both orally and intravenously at each of four doses (40 mg/kg of body weight, 13.33 mg/kg, 4.44 mg/kg, and 1.48 mg/kg), with 8 mice per group defined by dose, delivery method, and infecting strain. The 50% effective dose (ED₅₀), i.e., the dose allowing survival of 50% of the infected mice, is calculated for each delivery route using probit analysis.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Commun. 2023 Jun 22;14(1):3705.
- J Antimicrob Chemother. 2021 Jan 19;76(2):292-296.
- Front Microbiol. 2018 Sep 7;9:2095.
- Antimicrob Agents Chemother. 2023 Mar 15;e0165522.
- Antimicrob Agents Chemother. 2023 Jan 23;e0145922.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Choi S, et al. Activity of Tedizolid Phosphate (TR-701) in Murine Models of Infection with Penicillin-resistant and Penicillin-sensitive Streptococcus pneumoniae. Antimicrob Agents Chemother. 2012 Jun 19.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech@MedChemExpress.com$

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA