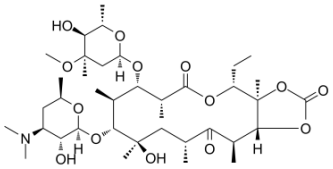
Davercin

Cat. No.:	HY-100584
CAS No.:	55224-05-0
Molecular Formula:	$C_{38}H_{65}NO_{14}$
Molecular Weight:	759.92
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (65.80 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.3159 mL	6.5796 mL	13.1593 mL
5 mM	0.2632 mL	1.3159 mL	2.6319 mL
10 mM	0.1316 mL	0.6580 mL	1.3159 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: ≥ 3 mg/mL (3.95 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 3 mg/mL (3.95 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 3 mg/mL (3.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Davercin (Erythromycin Cyclocarbonate), derivative of Erythromycin, which is active against Gram-positive and some Gram-negative microorganisms.

IC_{50} & Target

Antibacterial[1]

In Vitro

Erythromycin is used in treatment of respiratory, gastrointestinal, and genital tract infections, as well as skin and soft tissue

infections. Erythromycin, with its ten chiral centers and two sugar substituents (L-cladinose and D-desosamine), is a good starting point for numerous medicinal chemistry efforts for improvement of its biological profile (better activity, higher stability, and improved bioavailability) since the first generation of macrolides, which had low toxicity and good tolerability, are unstable in acidic media, had low toxicity and good tolerability[1].

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

REFERENCES

[1]. Jelic D, et al. From Erythromycin to Azithromycin and New Potential Ribosome-Binding Antimicrobials. Antibiotics (Basel). 2016 Sep 1;5(3). pii: E29.

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