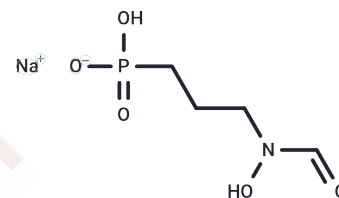


Fosmidomycin sodium salt

Chemical Properties

CAS No. :	66508-37-0
Formula:	C ₄ H ₉ NNaO ₅ P
Molecular Weight:	205.08
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Fosmidomycin sodium salt (FR-31564 sodium salt) is an anti-infective antibiotic with anti-malarial activity that inhibits both Gram-negative and Gram-positive bacteria.
Targets(IC50)	Antibacterial, Antibiotic, Parasite
In vitro	FR-31564 is a novel phosphonic acid antibiotic that exhibits activity against most Gram-negative and Gram-positive bacteria, except for mucoid <i>Pseudomonas aeruginosa</i> and glucose non-fermenting Gram-negative rods (excluding <i>Pseudomonas aeruginosa</i>). [1] [2][3].
In vivo	After oral administration of 50 or 100 mg/kg of Fosmidomycin sodium salt, animals showed no parasites in their bodies, while treatment with 20 mg/kg resulted in a parasitemia rate of less than 1%. However, recurrence was observed when treatment was discontinued after 4 days. Complete cure was achieved in mice treated with 30 mg/kg of Fosmidomycin sodium salt 8 days. Animals apparently free of parasites are observed after intraperitoneal treatment [2].

Solubility Information

Solubility	H ₂ O: 20 mg/mL (97.52 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8761 mL	24.3807 mL	48.7615 mL
5 mM	0.9752 mL	4.8761 mL	9.7523 mL
10 mM	0.4876 mL	2.4381 mL	4.8761 mL
50 mM	0.0975 mL	0.4876 mL	0.9752 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kojo H, et al. FR-31564, a new phosphonic acid antibiotic: bacterial resistance and membrane permeability. *J Antibiot (Tokyo)*. 1980 Jan;33(1):44-8.

Jomaa H, et al. Inhibitors of the nonmevalonate pathway of isoprenoid biosynthesis as antimalarial drugs. *Science*. 1999 Sep 3;285(5433):1573-6.

Fernandes JF, et al. Fosmidomycin as an antimalarial drug: a meta-analysis of clinical trials. *Future Microbiol*. 2015;10(8):1375-90.

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