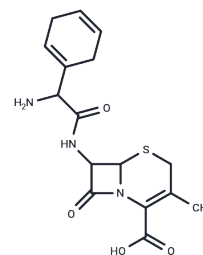


Cephradine

Chemical Properties

CAS No. :	38821-53-3
Formula:	C ₁₆ H ₁₉ N ₃ O ₄ S
Molecular Weight:	349.40
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Cephradine (Anspor) is a beta-lactam, first-generation cephalosporin antibiotic with bactericidal activity.
Targets(IC50)	Antibacterial, Antibiotic, TOPK
In vivo	Cephradine has a low order of acute, subacute, and chronic oral toxicity, and acute and subacute parenteral toxicity. After daily intravenous doses of cephradine has been given to monkeys for 2 weeks, these animals show no signs of nephrotoxicity. Cephradine does not induce any teratogenic changes in the offspring of either mice or rats. The route of administration has been a determinant in the choice of a cephalosporin antibiotic. It is a distinct therapeutic advantage that a single cephalosporin antibiotic, cephradine, may be used in both oral and parenteral preparations[2].
Cell Research	Cells Are seeded in six-well culture plates (9.6 cm ² , growth area) at a density of 10 ⁵ cells/cm ² . At 2 days postseeding, the medium is removed and cells are washed twice with pH 6.0 uptake buffer. Independent studies are performed for each drug solution at 1 mg/mL made in pH 6.0 uptake buffer. At each time point (10, 20, 30, 45, 60, 90 min), drug solution is removed and cells are washed three times with ice-cold pH 6.0 uptake buffer. One milliliter of Milli-Q water is added to each well and incubated for 30 min at 25 °C. Cells are harvested and sonicated for 1-2 min. ZnSO ₄ solution (8%, 200 mL) is added to the cell lysate, vortexed rigorously, and centrifuged for 5 min at 3000 rpm. After filtration of the supernatant through a membrane filter (0.45 mm), samples are analyzed by HPLC. (Only for Reference)

Solubility Information

Solubility	H ₂ O: 8.33 mg/mL (23.84 mM), Sonication is recommended. DMSO: 3.6 mg/mL (10.3 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.862 mL	14.3102 mL	28.6205 mL
5 mM	0.5724 mL	2.862 mL	5.7241 mL
10 mM	0.2862 mL	1.431 mL	2.862 mL
50 mM	0.0572 mL	0.2862 mL	0.5724 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

Han HK, et al. J Pharm Sci. 1999, 88(3):347-50.

Hassert GL, et al. Antimicrob Agents Chemother. 1973 Jun;3(6):682-5.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481