
Product Data Sheet

Product Name: Cephalexin hydrochloride

Cat. No.: GC13641

Chemical Properties

Cas. No. 59695-59-9

Chemical Name (6R,7R)-7-[[[(2R)-2-amino-2-phenylacetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid;hydrochloride

SMILES CC1=C(N2C(C(C2=O)NC(=O)C(C3=CC=CC=C3)N)SC1)C(=O)O.Cl

Formula $C_{16}H_{18}ClN_3O_4S$ M.Wt 383.85

Solubility DMSO : 100 mg/mL (260.52 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Cefalexin hydrochloride is a cephalosporin antibiotic. Target: Antibacterial Cefalexin (INN, BAN) or cephalexin (USAN, AAN) is a first-generation cephalosporin antibiotic introduced in 1967 by Eli Lilly and Company. It is an orally administered agent with a similar antimicrobial spectrum to the intravenous agents cefalotin and cefazolin. It was first marketed as Keflex (Lilly), and is marketed under several other trade names. As of 2008, cefalexin was the most popular cephalosporin antibiotic in the United States, with more than 25 million prescriptions of its generic versions alone, for US\$255 million in sales (though less popular than two other antibiotics, amoxicillin and azithromycin, each with 50 million prescriptions per year). Cefalexin is marketed by generic pharmaceutical manufacturers under a wide range of brand names, including: Apo-Cephalex, Biocef, Cefanox, Ceforal, Cephayos, Cephalexin, Cephorum, Ceporex, Cilex, Ialex, Ibilex, Kefexin, Keflet, Keflex, Rekosporin, Keforal, Keftab, Keftal, Lopilexin, Larixin, Novo-Lexin, Ospexin, Tenkorex, Zephalexin, Panixine Disperdose, Rancef, Sialexin, Sporidex and Ulexin. A version of Keflex 750 mg capsules is marketed for twice-daily dosage, to

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

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improve compliance. However, it is not a sustained release formulation, and since it is more expensive than the older strengths, some physicians prescribe three 250 mg capsules to be taken twice daily, as a less expensive alternative.

References:

- [1]. Speight TM, et al. Cephalexin: a review of its antibacterial, pharmacological and therapeutic properties. *Drugs*. 1972;3(1):9-78.
- [2]. Tanrisever B, et al. Cefadroxil. A review of its antibacterial, pharmacokinetic and therapeutic properties in comparison with cephalexin and cephradine. *Drugs*. 1986;32 Suppl 3:1-16.

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