
Product Data Sheet

Product Name: Cefoselis
 Cat. No.: GC17728

Chemical Properties

Cas. No. 122841-10-5

Chemical Name (6R,7R)-3-[[3-amino-2-(2-hydroxyethyl)pyrazol-1-ium-1-yl]methyl]-7-[[[(2Z)-2-(2-amino-1,3-thiazol-4-yl)-2-methoxyiminoacetyl]amino]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate

SMILES CON=C(C1=CSC(=N1)N)C(=O)NC2C3N(C2=O)C(=C(CS3)C[N+]4=CC=C(N4CCO)N)C(=O)[O-]

Formula $C_{19}H_{22}N_8O_6S_2$ M.Wt 522.56

Solubility Soluble in DMSO Storage Store at -20°C

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

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

Structure

Background

Cefoselis is a widely used antibiotic of β -lactam [1].

Cefoselis has a large antibacterial spectrum against gram positive bacterium. It is a 4th generation of cephalosporin. Cefoselis has some side effects, such as inducing seizures and convulsion in elder and renal failure patients. Through testing the dialysate and blood samples by HPLC, it shows that cefoselis appears in the striatal dialysate samples does-dependently and disappears rapidly from the extracellular fluid. In renal failure rats, the elimination half-lives of cefoselis are prolonged. It may be one factor of the seizures caused by cefoselis. In addition, administration of cefoselis into the hippocampus causes highly increase of extracellular glutamate and slightly increase of GABA, suggesting that cefoselis induces seizures through blocking the GABA receptors [1].

References:

[1] Ohtaki K, Matsubara K, Fujimaru S, Shimizu K, Awaya T, Suno M, Chiba K, Hayase N, Shiono H. Cefoselis, a beta-lactam antibiotic, easily penetrates the blood-brain barrier and causes seizure independently by glutamate release. J Neural Transm. 2004 Dec;111(12):1523-35.

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

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