
Piperacillin sodium

产品编号: D58236

CAS: 59703-84-3

分子式: C₂₃H₂₆N₅NaO₇S

纯度: 99.11%

InChi Key: InChiKey=WCMIIGXFCMNQDS-IDYPWDAWSA-M

Smiles: [Na+].CCN1CCN(C(=O)N[C@@H](C(=O)N[C@H]2[C@H]3SC(C)(C)[C@@H](N3C2=O)C([O-])=O)c2ccccc2)C(=O)C1=O

外观: 固体粉末

作用通路: Microbiology/virology

作用靶点: Antibacterial; Antibiotic

溶解性: DMSO:93 mg/mL (172.4 mM);Ethanol:93 mg/mL (172.4 mM);Water:92 mg/mL (170.5 mM)

保存条件: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

产品介绍: Piperacillin binds to and inactivates penicillin-binding proteins (PBPs), enzymes located on the inner membrane of the bacterial cell wall, resulting in the weakening of the bacterial cell wall and cell lysis. Piperacillin Sodium is the sodium salt of piperacillin, a broad-spectrum semisynthetic, ampicillin-derived ureidopenicillin antibiotic with bactericidal activity. PBPs participate in the terminal stages of assembling the bacterial cell wall, and in reshaping the cell wall during cell division. Inactivation of PBPs interferes with the cross-linkage of peptidoglycan chains necessary for bacterial cell wall strength and rigidity.