

Product Information

Antifection inhibitor Ampicillin trihydrate, Purity $\geq 98\%$

Cat. No.: X24-07-ZQ054

Size: 50 mg; 100 mg; 500 mg

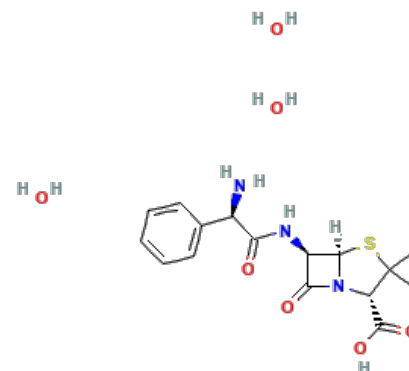
MDL: MFCD00072036

CAS Number: 7177-48-2

Compound CID: 23565

Synonym: 7177-48-2; Antifection inhibitor; NCI-C56086

This product is for research use only and is not intended for diagnostic use.



Product Information

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|--------------------------|--|
| Description | Ampicillin trihydrate, soluble in DMSO and water and insoluble in ethanol, has strong immunosuppressant properties. It targets β -lactam. |
| Molecular Weight | 403.45 |
| Molecular Formula | $C_{16}H_{19}N_3O_4S \cdot 3H_2O$ |
| Targets | β -lactam |
| IUPAC Name | (2 <i>S</i> ,5 <i>R</i> ,6 <i>R</i>)-6-[[<i>(2R)</i>]-2-amino-2-phenylacetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid;trihydrate |
| InChI | InChI=1S/C16H19N3O4S.3H2O/c1-16(2)11(15(22)23)19-13(21)10(14(19)24-16)18-12(20)9(17)8-6-4-3-5-7-8;;;/h3-7,9-11,14H,17H2,1-2H3,(H,18,20)(H,22,23);3*1H2/t9-,10-,11+,14-;;;/m1.../s1 |
| InChI Key | RXDALBZNGVATNY-CWLIKTRDSA-N |
| Canonical SMILES | CC1(C(N2C(S1)C(C2=O)NC(=O)C(C3=CC=CC=C3)N)C(=O)O)C.O.O.O |
| Isomeric SMILES | CC1([C@@H](N2[C@H](S1)[C@@H](C2=O)NC(=O)[C@@H](C3=CC=CC=C3)N)C(=O)O)C.O.O.O |
| Form | Lyophilized powder |
| Purity | $\geq 98\%$ |
| Solubility | DMSO: 78 mg/mL (193.32 mM); Water: 2 mg/mL (4.95 mM); Ethanol: Insoluble |
| Identity | Confirmed by NMR/HPLC/MS. |
| Stability | The product is stable for three years when stored at the recommended temperature in lyophilized powder. |
| Quality Level | Research grade |



Applications

Ampicillin trihydrate is utilized in research to explore its broad-spectrum antibacterial activity against gram-positive and gram-negative bacteria, aiding in developing therapeutic strategies.

Storage

Store at -20°C, and keep desiccated.
