

Product Information

Antifection inhibitor Cefadroxil hydrate, Purity $\geq 98\%$

Cat. No.: X24-07-ZQ086

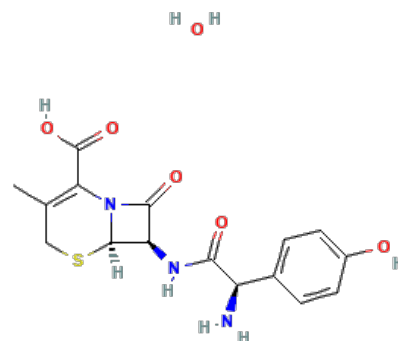
Size: 50 mg; 250 mg

CAS Number: 66592-87-8

Compound CID: 47964

Synonym: 66592-87-8; Antifection inhibitor; Duricef; Cefadroxil; Cefadroxil monohydrate; Bidocel

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



Product Information

Description	Cefadroxil hydrate, soluble in DMSO and water and insoluble in ethanol, has strong immunosuppressant properties. It targets β -lactam.
Molecular Weight	381.403
Molecular Formula	$C_{16}H_{19}N_3O_6S$
Targets	β -lactam
IUPAC Name	(6 <i>R</i> ,7 <i>R</i>)-7-[[[(2 <i>R</i>)-2-amino-2-(4-hydroxyphenyl)acetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid;hydrate
InChI	InChI=1S/C16H17N3O5S.H2O/c1-7-6-25-15-11(14(22)19(15)12(7)16(23)24)18-13(21)10(17)8-2-4-9(20)5-3-8;/h2-5,10-11,15,20H,6,17H2,1H3,(H,18,21)(H,23,24);1H2/t10-,11-,15-;/m1./s1
InChI Key	NBFNMSULHIODTC-CYJZLJNKSA-N
Canonical SMILES	<chem>CC1=C(N2C(C(=O)NC(=O)C(C3=CC=C(C(=C3)O)N)SC1)C(=O)O.O</chem>
Isomeric SMILES	<chem>CC1=C(N2[C@@H]([C@@H](C2=O)NC(=O)[C@@H](C3=CC=C(C(=C3)O)N)SC1)C(=O)O.O</chem>
Form	Lyophilized powder
Purity	$\geq 98\%$
Solubility	DMSO: 6 mg/mL (15.73 mM); Water: 1 mg/mL (2.62 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

Cefadroxil hydrate is explored in antibacterial research to understand its mechanism as a broad-spectrum cephalosporin antibiotic, enhancing studies on beta-lactam antibiotic interactions.

Storage

Store at -20°C, and keep desiccated.
