

Product Information

Antifection inhibitor Cefazolin sodium, Purity $\geq 98\%$

Cat. No.: X24-07-ZQ058

Size: 100 mg; 250 mg; 500 mg; 1000 mg

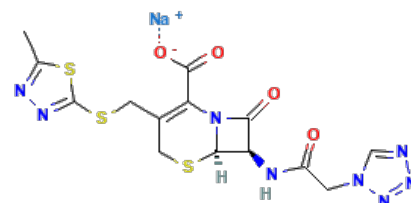
MDL: MFCD00056883

CAS Number: 27164-46-1

Compound CID: 23675322

Synonym: 27164-46-1; Antifection inhibitor; cephalosin sodium; Ancef

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



Product Information

Description	Cefazolin sodium, soluble in DMSO and water and insoluble in ethanol, has strong immunosuppressant properties. It targets β -lactam.
Molecular Weight	476.49
Molecular Formula	$C_{14}H_{14}N_8O_4S_3 \cdot Na$
Targets	β -lactam
IUPAC Name	Sodium;(6 <i>R</i> ,7 <i>R</i>)-3-[(5-methyl-1,3,4-thiadiazol-2-yl)sulfanylmethyl]-8-oxo-7-[[2-(tetrazol-1-yl)acetyl]amino]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate
InChI	InChI=1S/C14H14N8O4S3.Na/c1-6-17-18-14(29-6)28-4-7-3-27-12-9(11(24)22(12)10(7)13(25)26)16-8(23)2-21-5-15-19-20-21;/h5,9,12H,2-4H2,1H3,(H,16,23)(H,25,26);/q;+1/p-1/t9-,12-;/m1./s1
InChI Key	FLKYBGKDCCEQQM-WYUVZMMLSA-M
Canonical SMILES	<chem>CC1=NN=C(S1)SCC2=C(N3C(C(C3=O)NC(=O)CN4C=NN=N4)SC2)C(=O)[O-].[Na+]</chem>
Isomeric SMILES	<chem>CC1=NN=C(S1)SCC2=C(N3[C@@H]([C@@H](C3=O)NC(=O)CN4C=NN=N4)SC2)C(=O)[O-].[Na+]</chem>
Form	Lyophilized powder
Purity	$\geq 98\%$
Solubility	DMSO: 83 mg/mL (174.19 mM); Water: 83 mg/mL (174.19 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

Cefazolin sodium is employed to study its bactericidal action against a wide range of bacterial infections, often used in surgical prophylaxis research.

Storage

Store at -20°C, and keep desiccated.
