

Product Information

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

Cat. No.: X24-07-ZQ096

Size: 50 mg; 100 mg; 500 mg

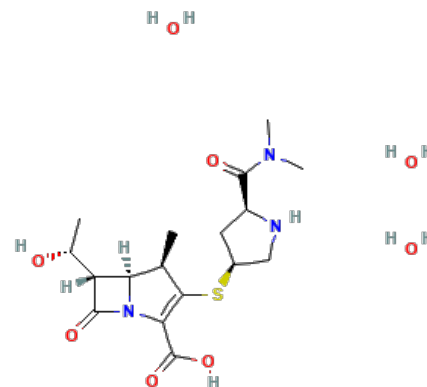
MDL: MFCD08600005

CAS Number: 119478-56-7

Compound CID: 441129

Synonym: 119478-56-7; Antifection inhibitor; SM 7338 trihydrate

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



Product Information

Description	Meropenem trihydrate, soluble in DMSO, water and ethanol, has strong immunosuppressant properties. It targets β -lactam.
Molecular Weight	437.51
Molecular Formula	$C_{17}H_{31}N_3O_8S$
Targets	β -lactam
IUPAC Name	(4R,5S,6S)-3-[(3S,5S)-5-(dimethylcarbamoyl)pyrrolidin-3-yl]sulfanyl-6-[(1R)-1-hydroxyethyl]-4-methyl-7-oxo-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid;trihydrate
InChI	InChI=1S/C17H25N3O5S.3H2O/c1-7-12-11(8(2)21)16(23)20(12)13(17(24)25)14(7)26-9-5-10(18-6-9)15(22)19(3)4;;/h7-12,18,21H,5-6H2,1-4H3,(H,24,25);3*1H2/t7-,8-,9+,10+,11-,12-;;/m1.../s1
InChI Key	CTUAQTBUVLKNDJ-OBZXMJSBSA-N
Canonical SMILES	CC1C2C(C(=O)N2C(=C1SC3CC(NC3)C(=O)N(C)C)C(=O)O)C(C)O.O.O.O
Isomeric SMILES	C[C@@H]1[C@@H]2[C@H](C(=O)N2C(=C1S[C@H]3C[C@H](NC3)C(=O)N(C)C)C(=O)O)[C@@H](C)O.O.O.O
Form	Lyophilized powder
Purity	$\geq 98\%$
Solubility	DMSO: 80 mg/mL (182.85 mM); Water: 80 mg/mL (182.85 mM); Ethanol: 4 mg/mL (9.14 mM)
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	Meropenem trihydrate is investigated for its broad-spectrum antibacterial activity, inhibiting bacterial cell wall synthesis and resistant to most beta-lactamases.
Storage	Store at -20°C, and keep desiccated.
