



Product Information

HIV protease inhibitor Darunavir, Purity $\geq 98\%$

Cat. No.: X24-07-ZQ151

Size: 5 mg; 10 mg; 50 mg; 100 mg

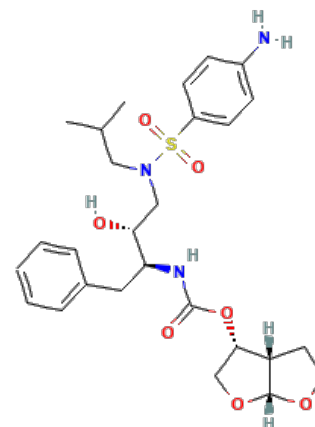
MDL: MFCD09260006

CAS Number: 206361-99-1

Compound CID: 213039

Synonym: 206361-99-1; HIV protease inhibitor; TMC114; TMC 114; TMC-114

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



Product Information

Description	Darunavir, soluble in DMSO and ethanol and insoluble in water, blocks the protease enzyme, essential for the maturation and replication of HIV, playing a key role in highly active antiretroviral therapy (HAART).
Molecular Weight	547.66
Molecular Formula	C ₂₇ H ₃₇ N ₃ O ₇ S
IUPAC Name	[(3a <i>S</i> ,4 <i>R</i> ,6a <i>R</i>)-2,3,3a,4,5,6a-hexahydrofuro[2,3- <i>b</i>]furan-4-yl] N-[(2 <i>S</i> ,3 <i>R</i>)4-[(4-aminophenyl)sulfonyl-(2-methylpropyl)amino]-3-hydroxy-1-phenylbutan-2-yl]carbamate
InChI	InChI=1S/C27H37N3O7S/c1-18(2)15-30(38(33,34)21-10-8-20(28)9-11-21)16-24(31)23(14-19-6-4-3-5-7-19)29-27(32)37-25-17-36-26-22(25)12-13-35-26/h3-11,18,22-26,31H,12-17,28H2,1-2H3,(H,29,32)/t22-,23-,24+,25-,26+/m0/s1
InChI Key	CJBJHOAVZSMMDJ-HEXNFIEUSA-N
Canonical SMILES	CC(C)CN(CC(C(CC1=CC=CC=C1)NC(=O)OC2COC3C2CCO3)O)S(=O)(=O)C4=CC=C(C=C4)N
Isomeric SMILES	CC(C)CN(C[C@H])([C@H])(CC1=CC=CC=C1)NC(=O)O[C@H]2CO[C@@H]3[C@H]2CCO3)O)S(=O)(=O)C4=CC=C(C=C4)N
Form	Lyophilized powder
Purity	$\geq 98\%$
Solubility	DMSO: 93 mg/mL (169.81 mM); Water: Insoluble; Ethanol: 10 mg/mL (18.25 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	Darunavir is an established HIV protease inhibitor studied for its effectiveness in treating HIV by preventing viral replication.
Storage	Store at -20°C, and keep desiccated.
