

Datasheet

Nelfinavir Mesylate

Product Name	Nelfinavir Mesylate
Catalogue Number	BSV-S4282
Chemical Formula	C ₃₃ H ₄₉ N ₃ O ₇ S ₂
Function	HIV protease inhibitor
CAS No.:	159989-65-8

Description:

Nelfinavir Mesylate is a potent **HIV protease** inhibitor with **K_i** of 2 nM.

Product Details:

Target: HIV protease [11](#) (Cell-free assay) 2nM

Chemical name:

N-(1,1-dimethylethyl)decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-(phenylthio)butyl]-(3S,4aS,8aS)-3-isoquinolinecarboxamide, methanesulfonate (1:1)

Formula: C₃₃H₄₉N₃O₇S₂

Molecular weight: 663.89

Purity: 99.43 %

Solubility: 100 mg/mL (DMSO), 100 mg/mL (ethanol)

Storage: 3 years -20°C powder, 2 years -80°C in solvent

Preparing stock solutions

Concentration / Mass	1 mg	5 mg	10 mg
1 mM	1.5063 mL	7.5314 mL	15.0627 mL
5 mM	0.3013 mL	1.5063 mL	3.0125 mL

10 mM	0.1506 mL	0.7531 mL	1.5063 mL
50 mM	0.0301 mL	0.1506 mL	0.3013 mL

Biological Activity:

In vivo:

In vivo studies indicate that AG1343 is well absorbed orally in a variety of species and possesses favorable pharmacokinetic properties in humans. Initial investigation of the compound in fed rats indicated an oral bioavailability of 43%. In contrast, the oral bioavailability was significantly reduced in fasted rats to 29%. Nelfinavir demonstrated significant oral bioavailability across a range of species including dogs (47%), marmosets (17%), and cynomolgus monkeys (26%). It has a long plasma half-life after oral dosing that is likely due to a combination of slow dissolution and absorption. nelfinavir is well absorbed in humans particularly when administered with food and possesses minimal and easily managed side effects^[1].

References:

[1] Kaldor SW, et al. *J Med Chem*, 1997,40(24):3979-85.