



Nelfinavir (Mesylate)

Catalog No: tcsc0923

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Size: 200mg
Size: 500mg
Size: 1g
Size: 2g
Specifications
CAS No: 159989-65-8
Formula: $C_{33}^{H}_{49}^{N}_{3}^{O}_{7}^{S}_{2}$
Pathway: Metabolic Enzyme/Protease;Anti-infection
Target: HIV Protease;HIV
Purity / Grade: >98%
Solubility:





DMSO: \geq 25 mg/mL (37.66 mM)

Alternative Names:

AG 1343 Mesylate

Observed Molecular Weight:

663.89

Product Description

Nelfinavir(AG-1341) is a potent and orally bioavailable human immunodeficiency virus HIV-1 protease inhibitor (Ki=2 nM) and is widely prescribed in combination with HIV reverse transcriptase inhibitors for the treatment of HIV infection.

IC50 & Target: Ki: 2 nM (HIV-1 protease)^[2].

In Vitro: In vitro exposure (72 hours) of HAECs to NEL (0.25-2 μg/mL) decreased both basal (2.5-fold) and insulin-induced NO production (4- to 5-fold). NEL suppressed insulin-induced phosphorylation of both Akt and eNOS at serine residues 473 and 1177, respectively. NEL decreased tyrosine phosphorylation of IR-β, IRS-1, and PI3K. Coexposure to troglitazone (TRO; 250 nM) ameliorated the suppressive effects of NEL on insulin signaling and NO production. Coexposure to TRO also increased eNOS expression in NEL-treated HAECs^[1]. Nelfinavir(AG-1341) is a potent enzyme inhibitor (K_i =2 nM) and antiviral agent (HIV-1 ED₅₀=14 nM). An X-ray cocrystal structure of the enzyme-Nelfinavir(AG-1341) complex reveals how the novel thiophenyl ether and phenol-amide substituents of the inhibitor interact with the S1 and S2 subsites of HIV-1 protease, respectively^[2].

In Vivo: In vivo studies indicate that Nelfinavir(AG-1341) is well absorbed orally in a variety of species and possesses favorable pharmacokinetic properties in humans^[2].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!