**Product Data Sheet**

**Chemical Properties**

**Product Name:** Nelfinavir Mesylate  
**Cas No.:** 159989-65-8  
**M.Wt:** 663.89  
**Formula:** C33H49N3O7S2  
**Synonyms:** AG 1343 Mesylate; AG1343 Mesylate; AG-1343 Mesylate, Nelfinavir  
**Chemical Name:** (3S,4aS,8aS)-N-tert-butyl-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl)amino]-4-phenylsulfanylbutyl]-3,4,4a,5,6,7,8,8a-octahydropseudo-1H-isoquinoline-3-carboxamide; methanesulfonic acid  
**Canonical SMILES:** 

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**Solubility:** ≥66.4mg/mL in DMSO  
**Storage:** Store at -20°C  
**General tips:** For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.  
**Shopping Condition:** Evaluation sample solution: ship with blue ice  
All other available size: ship with RT, or blue ice upon request

**Biological Activity**

**Targets:** Proteases  
**Pathways:** HIV Protease  
**Description:**

Nelfinavir Mesylate is a potent inhibitor of HIV-1 protease [1]. HIV-1 protease is a constitutive enzyme that processes gag and gag-pol polyproteins for
packaging into the nascent virion actively budding from a productively infected cell. Inhibition of the enzyme results in the formation of immature non-infectious particles [2].

Nelfinavir Mesylate is a potent inhibitor of HIV-1 protease with Ki of 2.0 nM. In CEM cells infected with the HIV strain IIIB, Nelfinavir Mesylate was potent antiviral agent with ED50 value of 14 nM and exhibited minimal cellular toxicity (TD50s > 5000 nM) [1]. In CEM-SS and MT-2 cells, Nelfinavir Mesylate protected these cells from acute HIV-1 RF- and HIV-1 IIIB-induced cell killing with EC50s ranging from 31 to 43 nM [3].

In 65 HIV-1-infected patients, Nelfinavir Mesylate was well-tolerated and exhibited robust antiviral activity with demonstrable superiority of the 750 mg and 1000 mg three times daily regimens. Thirty patients who continued to receive therapy at 12 months acquired a persistent 1.6 log10 reduction in HIV RNA, accompanied by a mean increase in CD4 cells of 180-200/mm3 [2].

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.