PRODUCT INFORMATION

Nelfinavir (mesylate)
Item No. 15144

CAS Registry No.: 159989-65-8
Formal Name: (3S,4aS,8aS)-N-(1,1-dimethylethyl) decahydro-2-[(2R,3R)-2-hydroxy-3-[(3-hydroxy-2-methylbenzoyl) amino]-4-(phenylthio)butyl]-3-isooquinolinecarboxamide, monomethanesulfonate

Synonyms: AG-1343, Nelfin, Viracept
MF: C_{32}H_{45}N_{3}O_{4}S • CH_{3}SO_{3}H
FW: 663.9
Purity: ≥ 98%
UV/Vis.: λ_{max}: 253 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Nelfinavir (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the nelfinavir (mesylate) in the solvent of choice. Nelfinavir (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of nelfinavir (mesylate) in ethanol and DMF is approximately 20 mg/ml and approximately 14 mg/ml in DMSO.

Nelfinavir (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nelfinavir (mesylate) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Nelfinavir (mesylate) has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Nelfinavir is an orally bioavailable inhibitor of the HIV-1 protease (K_{i} = 2 nM).\textsuperscript{1} It demonstrates anti-cancer activity, selectively preventing the growth of HER2-positive breast cancer cells in vitro by inhibiting Hsp90 (IC_{50} = 3.1 μM).\textsuperscript{2} Formulations containing nelfinavir have been used in combination with HIV reverse transcriptase inhibitors for the treatment of HIV infection.

References