

PRODUCT INFORMATION

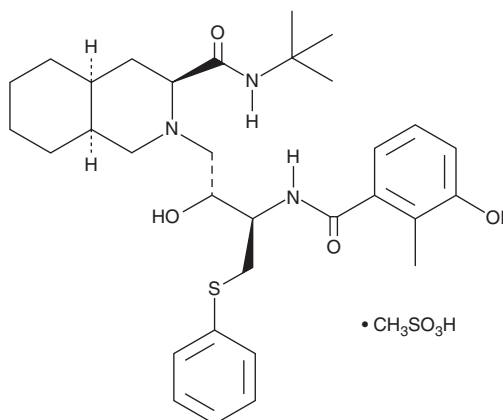


Nelfinavir (mesylate)

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-isoquinolinecarboxamide, monomethanesulfonate

Synonyms: AG-1343, Nelfin, Viracept
MF: C₃₂H₄₅N₃O₄S • CH₃SO₃H
FW: 663.9
Purity: ≥98%
UV/Vis.: λ_{max}: 253 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 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, which should be purged with an inert gas. Nelfinavir (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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).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).² Formulations containing nelfinavir have been used in combination with HIV reverse transcriptase inhibitors for the treatment of HIV infection.

References

1. Kaldor, S.W., Kalish, V.J., Davies, J.F.II., *et al.* Viracept (nelfinavir mesylate, AG1343): A potent, orally bioavailable inhibitor of HIV-1 protease. *J. Med. Chem.* **40**(24), 3979-3985 (1997).
2. Shim, J.S., Rao, R., Beebe, K., *et al.* Selective inhibition of HER2-positive breast cancer cells by the HIV protease inhibitor nelfinavir. *J. Natl. Cancer Inst.* **104**(20), 1576-1590 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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