PRODUCT INFORMATION



Nelfinavir-d₃ Item No. 29416

CAS Registry No.: 1217629-70-3

Formal Name: (3S,4aS,8aS)-N-(tert-butyl)-2-((2R,3R)-

> 2-hydroxy-3-(3-hydroxy-2-(methyl-d₂) benzamido)-4-(phenylthio)butyl) decahydroisoguinoline-3-carboxamide

MF: $C_{32}H_{42}D_3N_3O_4S$

FW: 570.8

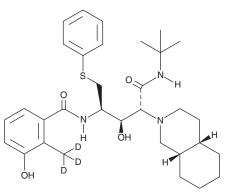
Chemical Purity: ≥95% (Nelfinavir)

Deuterium

Incorporation: ≥99% deuterated forms (d_1 - d_3); ≤1% d_0

Supplied as: A solid -20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Nelfinavir-d₃ is intended for use as an internal standard for the quantification of nelfinavir (Item No. 15144) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Nelfinavir-d₃ is supplied as a solid. A stock solution may be made by dissolving the nelfinavir-d₃ in the solvent of choice, which should be purged with an inert gas. Nelfinavir-d₃ is slightly soluble in methanol and DMSO.

Description

Nelfinavir is an orally bioavailable inhibitor of the HIV-1 protease (K_i = 2 nM). It demonstrates anticancer activity, selectively preventing the growth of HER2-positive breast cancer cells in vitro by inhibiting Hsp90 (IC₅₀ = 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.

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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