

PRODUCT INFORMATION



Indinavir-d₆ Item No. 29585

CAS Registry No.: 185897-02-3
Formal Name: 2,3,5-trideoxy-N-[(1S,2R)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-5-[(2S)-2-[[[(1,1-dimethylethyl)amino]carbonyl]-4-(3-pyridinyl-2,4,5,6-d₄-methyl-d₂)-1-piperazinyl]-2-(phenylmethyl)-D-erythro-pentonamide

Synonyms: L-735,524-d₆, MK-639-d₆

MF: C₃₆H₄₁D₆N₅O₄

FW: 619.8

Chemical Purity: ≥98% (Indinavir)

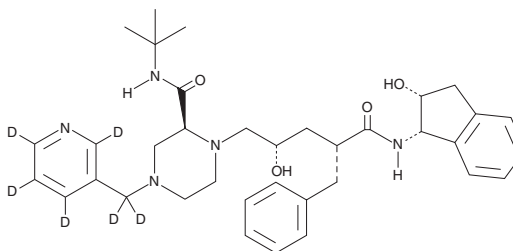
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₆);
≤1% d₀

Supplied as: A 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

Indinavir-d₆ is intended for use as an internal standard for the quantification of indinavir (Item No. 15150) 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).

Indinavir-d₆ is supplied as a solid. A stock solution may be made by dissolving the indinavir-d₆ in the solvent of choice, which should be purged with an inert gas. Indinavir-d₆ is soluble in organic solvents such as methanol, DMSO, and acetonitrile.

Description

Indinavir is an HIV-1 protease inhibitor ($K_i = 0.358$ nM).¹ It is selective for HIV-1 protease over HIV-2 protease ($K_i = 3.316$ nM), as well as human cathepsin D, porcine pepsin, bovine chymosin, human plasma renin, Factor Xa, and elastase at 10 μ M. It is also selective for wild-type HIV-1 protease over the protease inhibitor-resistant mutants A-44, K-60, and V-18 (K_i s = 0.24, 15, 50, and 40 nM, respectively).² Indinavir is active against multiple HIV-1 variants in cell-based assays (IC_{95} s = 12-100 nM).¹ Formulations containing indinavir have been used in combination with antiretroviral agents in the treatment of HIV infection.

References

1. Vacca, J.P., Dorsey, B.D., Schleif, W.A., *et al.* L-735,524: An orally bioavailable human immunodeficiency virus type 1 protease inhibitor. *Proc. Natl. Acad. Sci. U.S.A.* **91**(9), 4096-4100 (1994).
2. Dorsey, B.D., McDonough, C., McDaniel, S.L., *et al.* Identification of MK-944a: A second clinical candidate from the hydroxylaminepentanamide isostere series of HIV protease inhibitors. *J. Med. Chem.* **43**(18), 3386-3399 (2000).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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