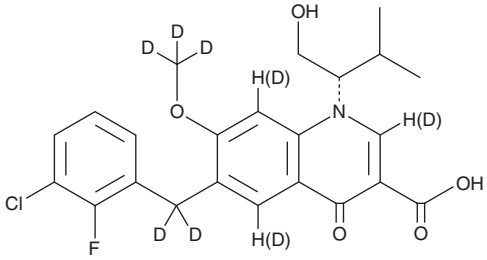
PRODUCT INFORMATION

Elvitegravir-d_6

Item No. 28523

Formal Name: 6-[(3-chloro-2-fluorophenyl)methyl]-1,4-dihydro-1-[(1S)-1-(hydroxymethyl)-2-methylpropyl]-7-methoxy-4-oxo-3-quinolinecarboxylic acid-d_6
MF: $C_{23}H_{17}ClD_6FNO_5$
FW: 453.9
Chemical Purity: ≥98% (Elvitegravir)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_6); ≤1% d_0
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

Elvitegravir-d_6 is intended for use as an internal standard for the quantification of elvitegravir (Item No. 17798) 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).

Elvitegravir-d_6 is supplied as a solid. A stock solution may be made by dissolving the elvitegravir-d_6 in the solvent of choice, which should be purged with an inert gas. Elvitegravir-d_6 is slightly soluble in methanol and DMSO.

Description

Elvitegravir is a quinolone antibiotic that inhibits HIV-1 integrase (IC_{50} = 7.2 nM).[1] It has antiviral activity against laboratory strains and clinical isolates of HIV-1 (EC_{50}s = 0.1-1.26 nM) in MAGI cells and HIV-2 (EC_{50}s = 0.3-0.9) in peripheral blood mononuclear cells (PBMCs).[1,2] Formulations containing elvitegravir have been used in the treatment of HIV infections.

References

1. Sato, M., Motomura, T., Aramaki, H., *et al.* Novel HIV-1 integrase inhibitors derived from quinolone antibiotics. *J. Med. Chem.* **49(5)**, 1506-1508 (2006).
2. Roquebert, B., Damond, F., Collin, G., *et al.* HIV-2 integrase gene polymorphism and phenotypic susceptibility of HIV-2 clinical isolates to the integrase inhibitors raltegravir and elvitegravir *in vitro*. *J. Antimicrob. Chemother.* **62(5)**, 914-920 (2008).

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