# PRODUCT INFORMATION



# Elvitegravir-d<sub>4</sub> 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<sub>4</sub>

MF: C<sub>23</sub>H<sub>17</sub>CID<sub>6</sub>FNO<sub>5</sub>

FW: 453.9

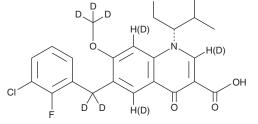
**Chemical Purity:** ≥98% (Elvitegravir)

Deuterium

 $\geq$ 99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>);  $\leq$ 1% d<sub>0</sub> Incorporation:

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

## Description

Elvitegravir is a quinolone antibiotic that inhibits HIV-1 integrase (IC $_{50}$  = 7.2 nM).<sup>1</sup> 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).<sup>1,2</sup> 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).

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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