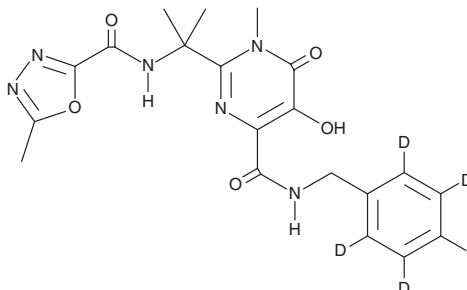


# PRODUCT INFORMATION



## Raltegravir-d<sub>4</sub> Item No. 26458

**CAS Registry No.:** 2712343-38-7  
**Formal Name:** N-[(4-fluorophenyl-d<sub>4</sub>)methyl]-1,6-dihydro-5-hydroxy-1-methyl-2-[1-methyl-1-[[[(5-methyl-1,3,4-oxadiazol-2-yl)carbonyl]amino]ethyl]-6-oxo-4-pyrimidinecarboxamide  
**MF:** C<sub>20</sub>H<sub>17</sub>D<sub>4</sub>FN<sub>6</sub>O<sub>5</sub>  
**FW:** 448.4  
**Chemical Purity:** ≥95% (Raltegravir)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**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

Raltegravir-d<sub>4</sub> is intended for use as an internal standard for the quantification of raltegravir (Item No. 16071) 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).

Raltegravir-d<sub>4</sub> is supplied as a solid. A stock solution may be made by dissolving the raltegravir-d<sub>4</sub> in the solvent of choice, which should be purged with an inert gas. Raltegravir-d<sub>4</sub> is soluble in DMSO.

### Description

Raltegravir is an orally bioavailable inhibitor of HIV-1 integrase (IC<sub>50</sub> = 15 nM in a strand transfer assay).<sup>1</sup> It inhibits the spread of HIV-1IIIb infection in MT-4 cell culture with 95% cell culture inhibitory concentration (CIC<sub>95</sub>) values of 19 and 31 nM in medium containing 10% heat-inactivated fetal bovine serum (FBS) or 50% normal human serum, respectively. Formulations containing raltegravir have been used in combination therapy in the treatment of HIV-1 infection.

### Reference

1. Summa, V., Petrocchi, A., Bonelli, F., *et al.* Discovery of raltegravir, a potent, selective orally bioavailable HIV-integrase inhibitor for the treatment of HIV-AIDS infection. *J. Med Chem.* **1(18)**, 5843-5855 (2008).

#### 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

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