

PRODUCT INFORMATION



Telaprevir-d₄ Item No. 31317

Formal Name: (1S,3aR,6aS)-2-((S)-2-((S)-2-cyclohexyl-2-(pyrazine-2-carboxamido)acetamido)-3,3-dimethylbutanoyl)-N-((S)-1-((cyclopropyl-2,2,3,3,3-d₄)amino)-1,2-dioxohexan-3-yl)octahydrocyclopenta[c]pyrrole-1-carboxamide

MF: C₃₆H₄₉D₄N₇O₆

FW: 683.9

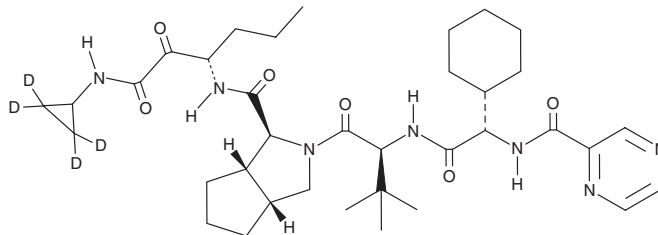
Chemical Purity: ≥95% (Telaprevir)

Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤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

Telaprevir-d₄ is intended for use as an internal standard for the quantification of telaprevir (Item No. 20054) 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).

Telaprevir-d₄ is supplied as a solid. A stock solution may be made by dissolving the telaprevir-d₄ in the solvent of choice, which should be purged with an inert gas. Telaprevir-d₄ is slightly soluble in methanol.

Description

Telaprevir is an inhibitor of hepatitis C virus (HCV) nonstructural protease 3/4A (NS3/4A; K_i = 7 nM).¹ It inhibits viral replication in genotype 1b HCV replicon cells and isolated human fetal hepatocytes infected with genotype 1a HCV-positive patient sera (IC₅₀s = 354 and 280 nM, respectively). Telaprevir (10-300 mg/kg) reduces plasma levels of a secreted placental alkaline phosphatase (SEAP) reporter gene in a mouse model of HCV NS3/4A protease activity. Formulations containing telaprevir have been used in the treatment of HCV.

Reference

1. Perni, R.B., Almquist, S.J., Byrn, R.A., *et al.* Preclinical profile of VX-950, a potent, selective, and orally bioavailable inhibitor of hepatitis C virus NS3-4A serine protease. *Antimicrob. Agents Chemother.* **50**(3), 899-909 (2006).

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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