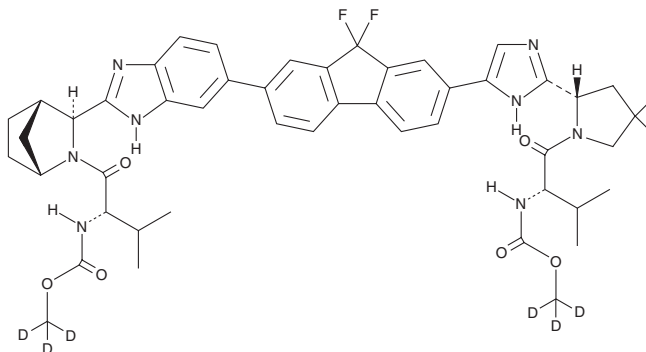


PRODUCT INFORMATION



Ledipasvir-d₆ Item No. 31322

CAS Registry No.: 2050041-12-6
Formal Name: N-[(1S)-1-[[[(6S)-6-[5-[9,9-difluoro-7-[2-[(1R,3S,4S)-2-[(2S)-2-[(methoxy-d₃-carbonyl)amino]-3-methyl-1-oxobutyl]-2-azabicyclo[2.2.1]hept-3-yl]-1H-benzimidazol-6-yl]-9H-fluoren-2-yl]-1H-imidazol-2-yl]-5-azaspiro[2.4]hept-5-yl]carbonyl]-2-methylpropyl]-carbamic acid, methyl-d₃ ester
MF: C₄₉H₄₈D₆F₂N₈O₆
FW: 895.1
Chemical Purity: ≥95% (Ledipasvir)
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

Ledipasvir-d₆ is intended for use as an internal standard for the quantification of ledipasvir (Item No. 18519) 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).

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

Description

Ledipasvir is an inhibitor of hepatitis C virus (HCV) non-structural protein 5A (NS5A).^{1,2} It inhibits viral replication in genotype 1a and 1b HCV replicon cells (EC₅₀s = 0.031 and 0.004 nM, respectively). It also inhibits viral replication in genotype 2a, 2b, 3a, 4a, 4d, 5a, 6a, and 6e HCV replicon cells (EC₅₀s = 0.11-530 nM).² Ledipasvir acts synergistically with IFN-α, ribavirin (Item No. 16757), or GS-9669 and additively with GS-9451, simeprevir (Item No. 22144), daclatasvir (Item No. 23730), or PSI-7977 (sofosbuvir; Item No. 15402) to inhibit viral replication in genotype 1a HCV replicon cells. Formulations containing ledipasvir have been used in combination therapy for the treatment of chronic HCV infection.

References

1. Link, J.O., Taylor, J.G., Xu, L., *et al.* Discovery of ledipasvir (GS-5885): A potent, once-daily oral NS5A inhibitor for the treatment of hepatitis C virus infection. *J. Med. Chem.* **57**(5), 2033-2046 (2014).
2. Cheng, G., Tian, Y., Doehle, B., *et al.* *In vitro* antiviral activity and resistance profile characterization of the hepatitis C virus NS5A inhibitor ledipasvir. *Antimicrob. Agents Chemother.* **60**(3), 1847-1853 (2016).

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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