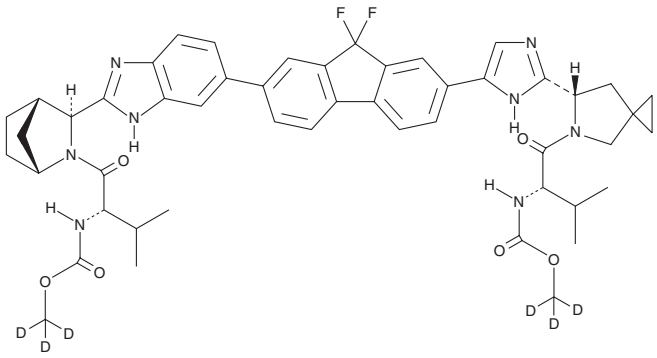
PRODUCT INFORMATION

Ledipasvir-d_6

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-d_3-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-d_3 ester
MF: $C_{49}H_{48}D_6F_2N_8O_6$
FW: 895.1
Chemical Purity: ≥95% (Ledipasvir)
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

Ledipasvir-d_6 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-d_6 is supplied as a solid. A stock solution may be made by dissolving the ledipasvir-d_6 in the solvent of choice, which should be purged with an inert gas. Ledipasvir-d_6 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 (EC_{50}s = 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 (EC_{50}s = 0.11-530 nM).[2] Lepidasvir 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM