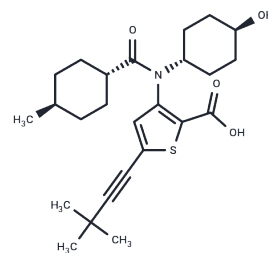


Lomibuvir

Chemical Properties

CAS No. :	1026785-55-6
Formula:	C ₂₅ H ₃₅ N ₂ O ₄ S
Molecular Weight:	445.61
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Lomibuvir (VCH-222) (VX-222) is a selective, non-nucleoside allosteric inhibitor of HCV NS5B polymerase (RdRp) with a K _d of 17 nM. Lomibuvir inhibits the 1b/Con1 HCV subgenomic replicon with an EC ₅₀ of 5.2 nM. Lomibuvir preferentially inhibits elongative RNA synthesis rather than de novo -initiated RNA synthesis [1].
Targets(IC ₅₀)	HCV Protease
In vitro	Lomibuvir (VX-222) is an effective non-nucleoside, allosteric inhibitor of the hepatitis C virus NS5B polymerase, exhibiting strong clinical efficacy. It demonstrates potent inhibition against the wild-type HCV 1b/Con1 replicon with an EC ₅₀ of 5.2 nM and against mutant replicons M423T, L419M, and I482L with EC ₅₀ s of 79.8, 563.1, and 45.3 nM, respectively. Besides slightly hindering de novo initiation, Lomibuvir prominently impairs primer extension, illustrated by an IC ₅₀ of 31 nM for primer-extended RNA synthesis.

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 82 mg/mL (184 mM), DMSO: 82 mg/mL (184 mM), (1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2441 mL	11.2206 mL	22.4411 mL
5 mM	0.4488 mL	2.2441 mL	4.4882 mL
10 mM	0.2244 mL	1.1221 mL	2.2441 mL
50 mM	0.0449 mL	0.2244 mL	0.4488 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Bedard J, et al. J Hepatol, 2009, 50(Suppl 1), S340.

Yi G, et al. Antimicrob Agents Chemother, 2012, 56(2), 830-837.