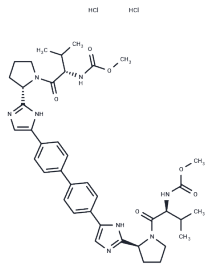
Data Sheet (Cat.No.T1786)

TargetMol

Daclatasvir dihydrochloride

Chemical Properties



CAS No. : 1009119-65-6

Formula: C40H52Cl2N8O6

Molecular Weight: 811.8

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Daclatasvir dihydrochloride (BMS-790052 dihydrochloride) is an orally available antiviral agent that inhibits the NS5A region of the hepatitis C virus (HCV) and is used in combination with other oral antivirals to treat chronic hepatitis C. Elevations in serum enzyme levels during daclatasvir therapy are uncommon, and it has not been convincingly implicated in cases of clinically apparent liver injury with jaundice.
Targets(IC50)	HCV Protease
Kinase Assay	CDK assays are performed in 96-well filter plates. All CDK-cyclin kinase complexes are expressed in insect cells through baculovirus infection and purified. The substrate for the assays is a fragment (amino acids 792-928) of pRb fused to GST (GST·RB-Cterm). The total volume in each well is 0.1 mL containing a final concentration of 20 mM Tris-HCl, pH 7.4, 50 mM NaCl, 1 mM dithiothreitol, 10 mM MgCl2, 25 μM ATP (for CDK4-cyclin D1, CDK6-cyclin D2, and CDK6-cyclin D3) or 12 μM ATP (for CDK2-cyclin E, CDK2-cyclin A, and CDC2-cyclin B) containing 0.25 μCi of [γ-32P]ATP, 20 ng of enzyme, 1 μg of GST·RB-Cterm, and Palbociclib (0.001-0.1 μM). All components except the [γ-32P]ATP are added to the wells, and the plate is placed on a plate mixer for 2 min. The reaction is started by adding the [γ-32P]ATP and the plate is incubated at 25°C for 15 min. The reaction is terminated by addition of 0.1 mL of 20% trichloroacetic acid and the plate is kept at 4°C for at least 1 hour to allow the substrate to precipitate. The wells are then washed 5 times with 0.2 mL of 10% trichloroacetic acid and radioactive incorporation is determined with a β plate counter.

Solubility Information

Solubility	DMSO: 90.9 mg/mL (111.97 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (1.23 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2318 mL	6.1592 mL	12.3183 mL
5 mM	0.2464 mL	1.2318 mL	2.4637 mL
10 mM	0.1232 mL	0.6159 mL	1.2318 mL
50 mM	0.0246 mL	0.1232 mL	0.2464 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fridell RA et al. Antimicrob Agents ChemOthers. 2010 Sep;54(9):3641-50.