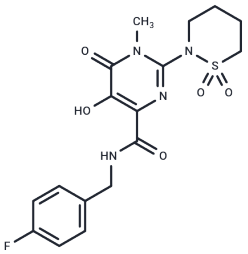
Data Sheet (Cat.No.T6420)

TargetMol

BMS-707035

Chemical Properties



CAS No. : 729607-74-3

Formula: C17H19FN4O5S

Molecular Weight: 410.42

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	BMS-707035 is a specific HIV-I integrase (IN) inhibitor with IC50 of 15 nM. Phase 2.
Targets(IC50)	HIV Protease
In vitro	BMS-707035 is a pyrimidine carboxamide similar to Raltegravir, the first integrase inhibitor licensed for clinical use. BMS-707035 is a potent, specific, and reversible HIV-I integrase (IN) inhibitor that blocks HIV IN strand transfer activity with IC50 of 15 nM. [1] However, several IN mutations, including V75I, Q148R, V151I, and G163R are found to confer resistance to HIV IN inhibitors. The binding of BMS-707035 and target DNA to IN are mutually exclusive events, as revealed by the fact that the inhibition of strand transfer catalysis by BMS-707035 is overcome by increasing amount of target DNA. The binding affinity of BMS-707035 to IN is also affected by the four terminal bases at the 5' end of the pre-processed U5 long terminal repeat (LTR). Gln148 of IN is crucial for the binding of BMS-707035 to IN. [1] The 3' terminus of the viral LTR, on the other hand, retards the rate of BMS-707035 association with IN, by regulating the kinetics of binding and dissociation. [2]

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 36 mg/mL (87.72 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: 2 mg/mL (4.87 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	2.4365 mL	12.1826 mL	24.3653 mL
5 mM	0.4873 mL	2.4365 mL	4.8731 mL
10 mM	0.2437 mL	1.2183 mL	2.4365 mL
50 mM	0.0487 mL	0.2437 mL	0.4873 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

Dicker IB, et al. J Biol Chem, 2007, 282(43), 31186-31196.
Langley DR, et al. Biochemistry, 2008, 47(51), 13481-13488.