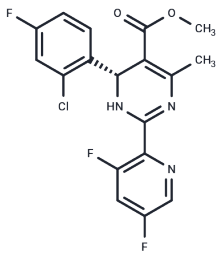
Data Sheet (Cat.No.T10480)

TargetMol

Bay 41-4109 (less active enantiomer)

Chemical Properties



CAS No. : 476617-51-3

Formula: C18H13ClF3N3O2

Molecular Weight: 395.76

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Bay 41-4109, a potent HBV inhibitor with an IC50 of 53 nM, exhibits greater activity compared to its less active enantiomer.
Targets(IC50)	HBV
In vivo	BAY 41-4109 exhibits dose-dependent reductions in viral DNA levels in both the liver and plasma, demonstrating effectiveness commensurate with 3TC. It also diminishes the hepatitis B virus core antigen (HBcAg) in the livers of HBV-transgenic mice. Pharmacokinetic analyses reveal swift absorption, a 30% bioavailability in mice, and dose-proportional plasma concentrations, reaching approximately 60% in rats and dogs [1]. Furthermore, BAY41-4109 disrupts in vivo virus production through a mechanism that interacts with the viral capsid [2].

Solubility Information

Solubility	DMSO: 37 mg/mL (93.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5268 mL	12.6339 mL	25.2678 mL
5 mM	0.5054 mL	2.5268 mL	5.0536 mL
10 mM	0.2527 mL	1.2634 mL	2.5268 mL
50 mM	0.0505 mL	0.2527 mL	0.5054 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

Weber O, et al. Inhibition of human hepatitis B virus (HBV) by a novel non-nucleosidic compound in a transgenic mouse model. Antiviral Res. 2002 May;54(2):69-78.
Stray SJ, et al. BAY 41-4109 has multiple effects on Hepatitis B virus capsid assembly. J Mol Recognit. 2006 Nov-Dec;19(6):542-8.
Wu GY, et al. Inhibition of hepatitis B virus replication by Bay 41-4109 and its association with nucleocapsid disassembly. J Chemother. 2008 Aug;20(4):458-67.

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