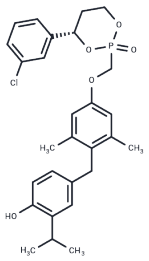
Data Sheet (Cat.No.T16018)

MB-07811

Chemical Properties



CAS No. : 852948-13-1

Formula: C28H32ClO5P

Molecular Weight: 514.98

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	MB-07811 (VK-2809) is an orally active HepDirect prodrug of MB-07344, known for its cholesterol and triglycerides lowering activity and its function as a liver-targeted THR-β agonist.
Targets(IC50)	Thyroid hormone receptor(THR)
In vitro	MB-07811 has a low affinity for thyroid hormone receptors with a Ki of 14.6 μM for TRβ and a Ki of 12.5 μM for TRα[2].
In vivo	In diet-induced obese mice, MB-07811 (0.3-30 mg/kg) decreases cholesterol and triglycerides[2].

Solubility Information

Solubility	DMSO: 45 mg/mL (87.38 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 (3.88 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	1.9418 mL	9.7091 mL	19.4182 mL
5 mM	0.3884 mL	1.9418 mL	3.8836 mL
10 mM	0.1942 mL	0.9709 mL	1.9418 mL
50 mM	0.0388 mL	0.1942 mL	0.3884 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

Cable EE, et al. Reduction of hepatic steatosis in rats and mice after treatment with aliver-targeted thyroidhormone receptor agonist. Hepatology. 2009 Feb;49(2):407-17.
Erion MD, et al. Targeting thyroid hormone receptor-beta agonists to the liver reduces cholesterol and triglycerides and improves the therapeutic index. Proc Natl Acad Sci U S A. 2007 Sep 25;104(39):15490-5.