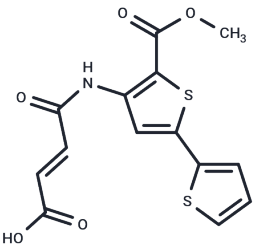
Data Sheet (Cat.No.T15506)

TargetMol

HTS01037

Chemical Properties



CAS No. : 682741-29-3

Formula: C14H11NO5S2

Molecular Weight: 337.37

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	HTS01037 is a fatty acid-binding inhibitor and a competitive antagonist of protein-protein interactions mediated by AFABP/aP2 (Ki: 0.67 μM).
Targets(IC50)	Others,FABP
In vitro	HTS01037 inhibits lipolysis in 3T3-L1 adipocytes and decreases LPS-stimulated inflammation in cultured macrophages. HTS01037 functions as a high affinity ligand of AFABP/aP2 (apparent Ki: 0.67 μM). HTS01037 is somewhat selective for AFABP/aP2, but at higher concentrations is a pan-specific FABP inhibitor. Treatment of microglial cells with HTS01037 enhances expression of Ucp2 and arginase in the presence or absence of palmitic acid. HTS01037 acts as an antagonist of the protein-protein interaction between AFABP/aP2 and hormone sensitive lipase but does not activate PPARγ in macrophage or CV-1 cells[1]. Cells exposed to HTS01037 shows attenuated expression of inducible nitric oxide synthase (iNOS) compared to palmitic acid alone indicating reduced NFκB signaling[2]. Treatment of macrophages with HTS01037 causes a marked decrease in both basal and fatty acid-stimulated LTC4 secretion but no change in 5-HETE production or 5-lipoxygenase expression[3].

Solubility Information

Solubility	DMSO: 150 mg/mL (444.62 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (9.78 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	2.9641 mL	14.8205 mL	29.641 mL
5 mM	0.5928 mL	2.9641 mL	5.9282 mL
10 mM	0.2964 mL	1.4821 mL	2.9641 mL
50 mM	0.0593 mL	0.2964 mL	0.5928 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

Hertzel AV, et al. Identification and characterization of a small molecule inhibitor of Fatty Acid binding proteins. J Med Chem. 2009 Oct 8;52(19):6024-31.
Duffy CM, et al. Identification of a fatty acid binding protein4-UCP2 axis regulating microglial mediated neuroinflammation. Mol Cell Neurosci. 2017 Apr;80:52-57.
Long EK, et al. Fatty acids induce leukotriene C4 synthesis in macrophages in a fatty acid binding protein-dependent manner. Biochim Biophys Acta. 2013 Jul;1831(7):1199-207.