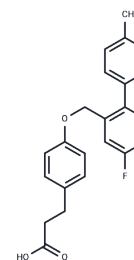


TUG-891

Chemical Properties

CAS No. : 1374516-07-0
 Formula: C₂₃H₂₁FO₃
 Molecular Weight: 364.41
 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	TUG-891 is a G protein-coupled receptor (GPCR) expressed in intestine, adipocytes, and pro-inflammatory macrophages that is activated by long chain free fatty acids.
Targets(IC50)	GPCR
In vitro	TUG-891 exhibits analogous signaling characteristics to the long-chain fatty acid (LCFA) α -linolenic acid at the human Free Fatty Acid receptor 4 (FFA4), stimulating Ca ²⁺ mobilization, recruiting β -arrestin-1 and β -arrestin-2, and promoting extracellular signal-regulated kinase phosphorylation. Moreover, TUG-891 activation of FFA4 leads to the receptor's swift phosphorylation and internalization[1].
Kinase Assay	Inhibition of recombinant human Mps1 by BAY 1161909 or BAY 1217389 is assessed in TRFRET-based in vitro kinase assays via phosphorylation of a biotinylated peptide (Biotin-Ahx-PWDPDDADITEILG-NH ₂). Under standard assay conditions kinase and test compound are preincubated for 15 min before enzyme reaction is started by addition of substrate and ATP upon 10 μ M[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (686.04 mM),Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), (< 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 (5.49 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7442 mL	13.7208 mL	27.4416 mL
5 mM	0.5488 mL	2.7442 mL	5.4883 mL
10 mM	0.2744 mL	1.3721 mL	2.7442 mL
50 mM	0.0549 mL	0.2744 mL	0.5488 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

Hudson BD, et al. The pharmacology of TUG-891, a potent and selective agonist of the free fatty acid receptor 4 (FFA4/GPR120), demonstrates both potential opportunity and possible challenges to therapeutic agonism. Mol Pharmacol. 2013 Nov;84(5):710-25.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481