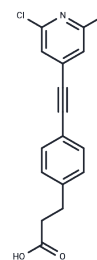


TUG-499

## Chemical Properties

CAS No. : 1206629-08-4  
 Formula: C<sub>16</sub>H<sub>11</sub>Cl<sub>2</sub>NO<sub>2</sub>  
 Molecular Weight: 320.17  
 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-499 is a selective free fatty acid receptor 1 (FFAR1 or GPR40) agonist (EC <sub>50</sub> : 7.39). It shows higher affinity for FFAR1 or GPR40 relative to related receptors FFA2, FFA3, and the nuclear receptor PPAR $\gamma$ , as well as various other receptors, ion channels, and transporter proteins. TUG-499 is useful for studying Type 2 diabetes.
Targets(IC <sub>50</sub> )	GPCR,PPAR
In vitro	TUG-499 exhibits remarkable chemical stability, does not inhibit specific CYP enzymes or P-glycoprotein, and displays outstanding Caco-2 permeability. Its potent effects are observed on recombinant human FFA1 receptors as well as the INS-1E rat insulinoma cell line.[1]

## Solubility Information

Solubility	DMSO: 22.5 mg/mL (70.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (6.25 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	3.1233 mL	15.6167 mL	31.2334 mL
5 mM	0.6247 mL	3.1233 mL	6.2467 mL
10 mM	0.3123 mL	1.5617 mL	3.1233 mL
50 mM	0.0625 mL	0.3123 mL	0.6247 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

Christiansen E, et al. Identification of a potent and selective free fatty acid receptor 1 (FFA1/GPR40) agonist with favorable physicochemical and in vitro ADME properties. J Med Chem. 2011;54(19):6691-6703.

**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