

PRGL493

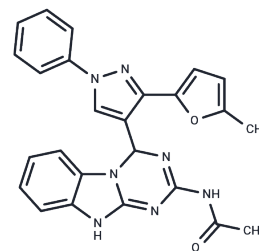
Chemical Properties

CAS No. : 2479378-45-3

Formula: C₂₅H₂₁N₇O₂

Molecular Weight: 451.48

Storage: Store at low temperature, Keep away from direct sunlight
 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	PRGL493 is an inhibitor of long-chain acyl-CoA synthetase 4 (ACSL4). It inhibits formation of arachidonoyl-CoA (AA-CoA) from arachidonic acid in, as well as the proliferation and migration of, PC3 and MDA-MB-231 cancer cells when used at a concentration of 50 μ M. PRGL493 (5 μ M) reduces production of progesterone induced by 8-Br-cyclic AMP (8-Br-cAMP) in MA-10 Leydig tumor cells. It inhibits tumor growth in a PC3 mouse xenograft model when administered at a dose of 0.25 mg/kg.
Targets(IC50)	Others, Ferroptosis

Solubility Information

Solubility	Chloroform: 1 mg/mL (2.21 mM), Sonication is recommended. DMSO: 3.66 mg/mL (8.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.37 mg/mL (0.82 mM), Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.21 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	2.2149 mL	11.0747 mL	22.1494 mL
5 mM	0.443 mL	2.2149 mL	4.4299 mL
10 mM	0.2215 mL	1.1075 mL	2.2149 mL
50 mM	0.0443 mL	0.2215 mL	0.443 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

Castillo, A.F., Orlando, U.D., Maloberti, P.M., et al. New inhibitor targeting Acyl-CoA synthetase 4 reduces breast and prostate tumor growth, therapeutic resistance and steroidogenesis. *Cell. Mol. Life Sci.* (2020)

Huang Q, Ru Y, Luo Y, et al. Identification of a targeted ACSL4 inhibitor to treat ferroptosis-related diseases. *Science Advances*. 2024, 10(13): eadk1200.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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