

Gly- β -MCA

Chemical Properties

CAS No. : 66225-78-3

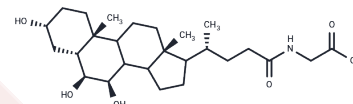
Formula: C₂₆H₄₃N₆O₆

Molecular Weight: 465.62

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	Gly- β -MCA is an orally bioactive, enteroselective and potent inhibitor of the farnesoid X receptor (FXR), a bile acid, used in the study of obesity and diabetes.
Targets(IC50)	FXR, Autophagy
In vitro	Gly- β -MCA is an effective intestinal selective farnesoid X receptor (FXR) inhibitor, belonging to the bile acids class[1]. Gly- β -MCA (Gly-MCA) exhibits resistance to hydrolysis by BSH (bile salt hydrolase)[1].
In vivo	Gly- β -MCA (Gly-MCA, oral administration, 10 and 50 mg/kg) can prevent and treat diet-induced and genetic obesity, insulin resistance, and hepatic steatosis in mice, without causing systemic, hepatic, or intestinal toxicity[1]. Gly-MCA does not increase fecal LCN-2 levels, indicating that Gly-MCA does not induce intestinal inflammation[1].

Solubility Information

Solubility	H ₂ O: <0.1 mg/mL (Insoluble) DMSO: 50 mg/mL (107.38 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 (4.3 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	2.1477 mL	10.7384 mL	21.4767 mL
5 mM	0.4295 mL	2.1477 mL	4.2953 mL
10 mM	0.2148 mL	1.0738 mL	2.1477 mL
50 mM	0.043 mL	0.2148 mL	0.4295 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

Jiang C, et al. Intestine-selective farnesoid X receptor inhibition improves obesity-related metabolic dysfunction. Nat Commun. 2015 Dec 15;6:10166.

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