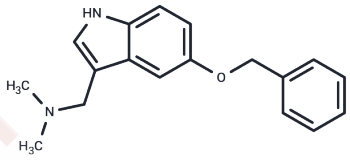
Data Sheet (Cat.No.T35841)

TargetMol

5-Benzyloxygramine

Chemical Properties



CAS No. :	1453-97-0
Formula:	C18H20N2O
Molecular Weight:	280.36
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	5-Benzyloxygramine is an N protein PPI orthosteric stabilizer that exhibits both antiviral and N-NTD protein-stabilizing activities. It stabilizes the N-NTD dimers through simultaneous hydrophobic interactions with both partners, resulting in abnormal N protein oligomerization, which was further confirmed in cell studies[1]. [1]. Shan-Meng Lin, et al. Structure-Based Stabilization of Non-native Protein-Protein Interactions of Coronavirus Nucleocapsid Proteins in Antiviral Drug Design. J Med Chem. 2020 Mar 26;63 (6):3131-3141.
Targets(IC50)	5-HT Receptor,Antibiotic,Dopamine Receptor
In vitro	5-Benzyloxygramine induces stabilization of N-NTD dimers via concurrent hydrophobic interactions with both entities, leading to irregular N protein oligomerization, a finding further substantiated in cellular studies[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (891.71 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: 5 mg/mL (17.83 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	3.5668 mL	17.8342 mL	35.6684 mL
5 mM	0.7134 mL	3.5668 mL	7.1337 mL
10 mM	0.3567 mL	1.7834 mL	3.5668 mL
50 mM	0.0713 mL	0.3567 mL	0.7134 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

Shan-Meng Lin, et al. Structure-Based Stabilization of Non-native Protein-Protein Interactions of Coronavirus Nucleocapsid Proteins in Antiviral Drug Design. J Med Chem. 2020 Mar 26;63(6):3131-3141.