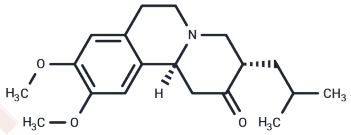
Data Sheet (Cat.No.T0719)

TargetMol

Tetrabenazine

Chemical Properties



CAS No. : 58-46-8

Formula: C19H27NO3

Molecular Weight: 317.42

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	Tetrabenazine (Ro 1-9569) is a former antipsychotic drug used to treat various movement disorders. It inhibits neurotransmitter uptake into adrenergic storage vesicles and serves as a high-affinity label for the vesicle transport system.
Targets(IC50)	Dopamine Receptor,Monoamine Transporter

Solubility Information

Solubility	DMSO: 71.43 mg/mL (225.03 mM),Sonication is recommended. Ethanol: 23.4 mg/mL (73.72 mM),Sonication is recommended. H2O: < 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 (6.3 mM),Sonication is recommended. 10% DMSO+90% Saline: 7.14 mg/mL (22.49 mM),Suspension. *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	3.1504 mL	15.752 mL	31.504 mL
5 mM	0.6301 mL	3.1504 mL	6.3008 mL
10 mM	0.315 mL	1.5752 mL	3.1504 mL
50 mM	0.063 mL	0.315 mL	0.6301 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

Zheng G, et al. AAPS J. 2006 Nov 10;8(4):E682-92.
Wei F, Liu H, Zhang W, et al.Drug inhibition and substrate transport mechanisms of human VMAT2.Nature Communications.2025, 16(1): 323.