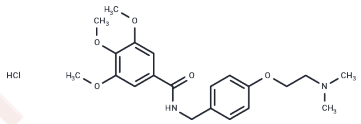
Data Sheet (Cat.No.T5009)

TargetMol

Trimethobenzamide hydrochloride

Chemical Properties



CAS No. : 554-92-7

Formula: C21H29ClN2O5

Molecular Weight: 424.92

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	Trimethobenzamide hydrochloride (Ro 2-9578) is a blocker of the D2 receptor. Trimethobenzamide is an antiemetic used to prevent nausea and vomiting.
Targets(IC50)	Dopamine Receptor,Influenza Virus
In vitro	Trimethobenzamide, a (non-phenothiazine) benzamide antiemetic, centrally blocks D2 receptors, inhibiting the medullary chemoreceptor trigger zone by obstructing emetic impulses to the vomiting center.
In vivo	Trimethobenzamide exhibits an oral bioavailability ranging from 60% to 100%, with a peak time of approximately 45 minutes post-oral administration. When administered intramuscularly (I.M.), the peak time is around 30 minutes.

Solubility Information

Solubility	DMSO: 131.25 mg/mL (308.88 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: 4 mg/mL (9.41 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (23.53 mM),Solution. *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	2.3534 mL	11.7669 mL	23.5338 mL
5 mM	0.4707 mL	2.3534 mL	4.7068 mL
10 mM	0.2353 mL	1.1767 mL	2.3534 mL
50 mM	0.0471 mL	0.2353 mL	0.4707 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

Smith HS, et al. Dopamine receptor antagonists. Ann Palliat Med. 2012 Jul;1(2):137-42.