

N-Methylbenzamide

Chemical Properties

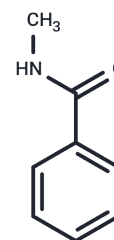
CAS No. : 613-93-4

Formula: C₈H₉NO

Molecular Weight: 135.16

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	N-Methylbenzamide is a potent inhibitor of phosphodiesterase 10A (PDE10A) with demonstrated anti-cancer activity.
Targets(IC50)	PDE
In vivo	N-Methylbenzamide is active against tumor in donor female BDF mice (18-23 g)[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (443.92 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 (14.8 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	7.3986 mL	36.9932 mL	73.9864 mL
5 mM	1.4797 mL	7.3986 mL	14.7973 mL
10 mM	0.7399 mL	3.6993 mL	7.3986 mL
50 mM	0.148 mL	0.7399 mL	1.4797 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

Gate, E. N., et al. Structural studies on bioactive compounds. 4. A structure-antitumor activity study on analogs of N-methylformamide. *Journal of Medicinal Chemistry*, 1986, 29(6), 1046-1052.

Kilburn JP, et al. N-Methylanilide and N-methylbenzamide derivatives as phosphodiesterase 10A (PDE10A) inhibitors. *Bioorg Med Chem*. 2013 Oct 1;21(19):6053-62.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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