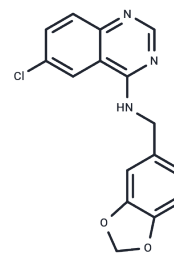


MBCQ

Chemical Properties

CAS No. :	150450-53-6
Formula:	C ₁₆ H ₁₂ ClN ₃ O ₂
Molecular Weight:	313.74
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	MBCQ is an inhibitor of cGMP-specific phosphodiesterase PDE5.
Targets(IC50)	PDE
In vitro	MBCQ, a selective PDE5 inhibitor, significantly decreased the EC(50) values for GTN-induced relaxation in both tolerant and nontolerant tissues, but with the greatest relative shift occurring in tolerant veins[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (79.68 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (6.37 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	3.1874 mL	15.9368 mL	31.8735 mL
5 mM	0.6375 mL	3.1874 mL	6.3747 mL
10 mM	0.3187 mL	1.5937 mL	3.1874 mL
50 mM	0.0637 mL	0.3187 mL	0.6375 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

Macpherson J D , Gillespie T D , Dunkerley H A , et al. Inhibition of Phosphodiesterase 5 Selectively Reverses Nitrate Tolerance in the Venous Circulation[J]. Journal of Pharmacology & Experimental Therapeutics, 2006, 317(1):188.
Kaneda T , Yamamoto H , Azegami Y , et al. Lack of Cyclic Nucleotide Regulation of MBCQ-induced Relaxation of Rat Ileal Smooth Muscle[J]. J Smooth Muscle Res, 2003, 39(3):47-54.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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