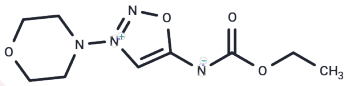
Data Sheet (Cat.No.T0109)

TargetMol

Molsidomine

Chemical Properties



CAS No. : 25717-80-0

Formula: C9H14N4O4

Molecular Weight: 242.23

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	Molsidomine (Corvaton) is an orally active, long-acting vasodilating drug. It metabolizes in the liver to the active metabolite linsidomine, that releases nitric oxide (NO) upon decay as the actual vasodilating compound.
Targets(IC50)	NOD,Drug Metabolite
In vivo	Molsidomine (50, 100, 250 μg/kg) reduces coronary flow while the coronary resistance remains unaffected by molsidomine. Molsidomine decreases myocardial oxygen consumption. Heart rate and contractility remains unchanged by molsidomine. Stroke volume and cardiac output fall after molsidomine. The fall in blood pressure after molsidomine follows the reduction in cardiac output as sequel of lowered preload and venous return to the heart[1].

Solubility Information

Solubility	DMSO: 45 mg/mL (185.77 mM),Sonication is recommended. H2O: 9 mg/mL (37.15 mM),Sonication is recommended. Ethanol: 21 mg/mL (86.69 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 (8.26 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	4.1283 mL	20.6415 mL	41.2831 mL
5 mM	0.8257 mL	4.1283 mL	8.2566 mL
10 mM	0.4128 mL	2.0642 mL	4.1283 mL
50 mM	0.0826 mL	0.4128 mL	0.8257 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

Volker B. Fiedler, et al. Naunyn-Schmiedeberg's Archives of Pharmacology. 1981, 317(1):71-77.