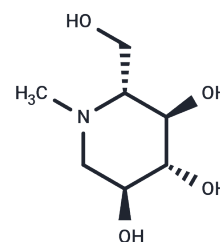


## N-Methylmoranoline

## Chemical Properties

CAS No. :	69567-10-8
Formula:	C7H15NO4
Molecular Weight:	177.2
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-Methylmoranoline is an inhibitor of $\alpha$ -glucosidase.
Targets(IC50)	Others,Glucosidase,glycosidase
In vivo	N-Methylmoranoline(MOR-14) dose-dependently decreased the alpha-1,6-glucosidase activity in rabbit heart extract.?The myocardial uptake of a considerable amount of MOR-14 sufficient to fully inhibit alpha-1,6-glucosidase.?To assess the infarct size-reducing effect of MOR-14, 54 rabbits were subjected to 30-minute coronary occlusion followed by 48-hour reperfusion.?Preischemic treatment with 25, 50, and 100 mg/kg of MOR-14 dose-dependently reduced the infarct size (to 26+/-4%, 19+/-3%, and 14+/-2% of the area at risk, respectively), compared with the saline control (45+/-5%) without altering the blood pressure or heart rate.?Another 40 rabbits given 100 mg of MOR-14 or saline 10 minutes before ischemia were euthanized at 10 or 30 minutes of ischemia for biochemical analysis.?MOR-14 decreased the alpha-1,6-glucosidase activity to approximately 20% in vivo, reduced the glycogen breakdown, and attenuated the lactate accumulation at both 10 and 30 minutes of ischemia[1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.6433 mL	28.2167 mL	56.4334 mL
5 mM	1.1287 mL	5.6433 mL	11.2867 mL
10 mM	0.5643 mL	2.8217 mL	5.6433 mL
50 mM	0.1129 mL	0.5643 mL	1.1287 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

Arai M, et al. N-methyl-1-deoxynojirimycin (MOR-14), an alpha-glucosidase inhibitor, markedly reduced infarct size in rabbit hearts. *Circulation*. 1998 Apr 7;97(13):1290-7.

Arai M, et al. Role of protein kinase C in the reduction of infarct size by N-methyl-1-deoxynojirimycin, an alpha-1,6-glucosidase inhibitor. *Br J Pharmacol*. 2001 Jul;133(5):635-42.

Nishida Y, et al. N-methyl-1-deoxynojirimycin (MOR-14), an alpha-glucosidase inhibitor, markedly improves postischemic left ventricular dysfunction. *Heart Vessels*. 2000;15(6):268-73.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481