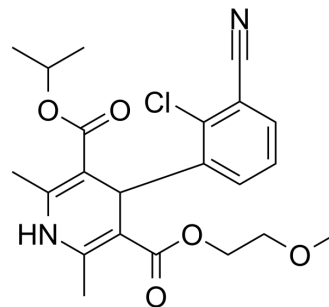


(Rac)-MEM 1003

Cat. No.:	HY-121604		
CAS No.:	165187-25-7		
Molecular Formula:	C ₂₂ H ₂₅ ClN ₂ O ₅		
Molecular Weight:	432.9		
Target:	Calcium Channel		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (288.75 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.3100 mL	11.5500 mL	23.1000 mL
	5 mM	0.4620 mL	2.3100 mL	4.6200 mL
	10 mM	0.2310 mL	1.1550 mL	2.3100 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (4.80 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.08 mg/mL (4.80 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (4.80 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(Rac)-MEM 1003 is the racemate of MEM 1003. MEM 1003, a dihydropyridine compound, is a potent L-type Ca²⁺ channel antagonist and has the potential for Alzheimer's disease research^[1].

REFERENCES

[1]. Gregory M Rose, et al. Efficacy of MEM 1003, a novel calcium channel blocker, in delay and trace eyeblink conditioning in older rabbits. *Neurobiol Aging*. 2007 May;28(5):766-73.

Caution: Product has not been fully validated for medical applications. For research use only.

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