NMDA-IN-1

Cat. No.: HY-12962

CAS No.: 700878-19-9

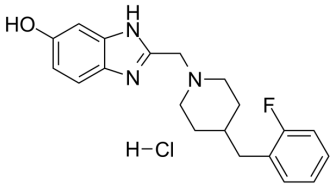
Molecular Formula: $C_{20}H_{23}ClFN_3O$

Molecular Weight: 375.87

Target: iGluR

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 12.5 mg/mL (33.26 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6605 mL	13.3025 mL	26.6049 mL
	5 mM	0.5321 mL	2.6605 mL	5.3210 mL
	10 mM	0.2660 mL	1.3302 mL	2.6605 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 1.25 mg/mL (3.33 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1.25 mg/mL (3.33 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1.25 mg/mL (3.33 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

NMDA-IN-1 is a potent and NR2B-selective NMDA antagonist with Ki of 0.85 nM; NR2B Ca2+ influx IC50 is 9.7 nM; no activities on NR2A, NR2C, NR2D, hERG-channel and α1-adrenergic receptor.

REFERENCES

[1]. McCauley JA, et al. NR2B-selective N-methyl-D-aspartate antagonists: synthesis and evaluation of 5-substituted benzimidazoles. J Med Chem. 2004 Apr 8;47(8):2089-96.

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

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