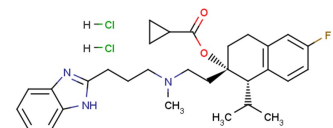


## Data Sheet (Cat.No.T12238)

NNC 55-0396

### Chemical Properties

CAS No.:	357400-13-6
Formula:	C30H40Cl2FN3O2
Molecular Weight:	564.56
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



### Biological Description

Description	NNC 55-0396 is a highly selective blocker of T-type calcium channel(IC50 of 6.8 and > 100 µM for inhibition of Cav3.1 T-type channels and HVA currents respectively in INS-1 cells.)
Targets(IC50)	Others: None

### Solubility Information

Solubility	DMSO: 100 mg/mL (177.13 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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#### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.771 mL	8.856 mL	17.713 mL
5 mM	0.354 mL	1.771 mL	3.543 mL
10 mM	0.177 mL	0.886 mL	1.771 mL
50 mM	0.035 mL	0.177 mL	0.354 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

1. Arnulfo Quesadaa, Peter H. Bui, Gregg E. Homanics, et al. Comparison of mibefradil and derivative NNC 55-0396 effects on behavior, cytochrome P450 activity, and tremor in mouse models of essential tremor. *European Journal of Pharmacology*. 2011,659 (1): 30-36.
2. Timo Strünker, Normann Goodwin, Christoph Brenker, et al. The CatSper channel mediates progesterone-induced Ca<sup>2+</sup> influx in human sperm. *Nature*, 2011,471, 382-386.
3. Hideto Miwa, Jinsoo Koh, Yoshinori Kajimoto, et al. Effects of T-type calcium channel blockers on a parkinsonian tremor model in rats. *Pharmacology Biochemistry and Behavior*. 2011,97(4): 656-659.
4. Li M, Hansen JB, Huang L, et al. Towards selective antagonists of T-type calcium channels: design, characterization and potential applications of NNC 55-0396. *Cardiovasc Drug Rev*. 2005 Summer;23(2):173-96.
5. Huang L, Keyser BM, Tagmose TM, et al. NNC 55-0396 [(1S,2S)-2-(2-(N-[(3-benzimidazol-2-yl)propyl]-N-methylamino)ethyl)-6-fluoro-1,2,3,4-tetrahydro-1-isopropyl-2-naphthyl cyclopropanecarboxylate dihydrochloride]: a new selective inhibitor of T-type calcium channels. *J Pharmacol Exp Ther*. 2004 Apr;309(1):193-9.

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