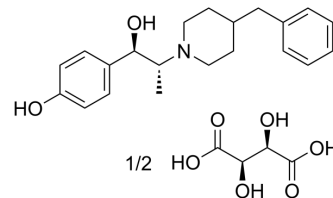


## threo-Ifenprodil hemitartrate

<b>Cat. No.:</b>	HY-107708
<b>CAS No.:</b>	1312991-83-5
<b>Molecular Formula:</b>	$C_{21}H_{27}NO_2 \cdot 1/2 C_4H_6O_6$
<b>Molecular Weight:</b>	400.5
<b>Target:</b>	iGluR; Sigma Receptor; Potassium Channel
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	threo Ifenprodil hemitartrate is a $\sigma$ receptor agonist, with $K_{iS}$ of 59.1 and 2 nM for $\sigma_1$ and $\sigma_2$ receptors, respectively. threo Ifenprodil hemitartrate is also a NR2B subunit-selective NMDA receptor antagonist ( $IC_{50}$ =0.22 $\mu$ M). threo Ifenprodil hemitartrate is a hERG potassium channel inhibitor, with an $IC_{50}$ of 88 nM, showing antiarrhythmic activity <sup>[1][2][3]</sup> .
<b><math>IC_{50}</math> &amp; Target</b>	$IC_{50}$ : 0.22 $\mu$ M (NMDA) <sup>[1]</sup> .

### REFERENCES

- [1]. Hashimoto K, et al. Interactions of erythro-ifenprodil, threo-ifenprodil, erythro-iodoifenprodil, and eliprodil with subtypes of sigma receptors. *Eur J Pharmacol.* 1995 Feb 6;273(3):307-10.
- [2]. Avenet P, et al. Antagonist properties of the stereoisomers of ifenprodil at NR1A/NR2A and NR1A/NR2B subtypes of the NMDA receptor expressed in Xenopus oocytes. *Eur J Pharmacol.* 1996 Jan 25;296(2):209-13.
- [3]. Monassier L, et al. sigma(2)-receptor ligand-mediated inhibition of inwardly rectifying K(+) channels in the heart. *J Pharmacol Exp Ther.* 2007 Jul;322(1):341-50.

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

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