

## Catalog # 10-4200 NE-100

4-Methoxy-3-(2-phenylethoxy)-N,N,dipropylbenzeneethanamine hydrochloride 149409-57-4 Lot # FBA6131

NE-100 is potent inhibitor of the sigma receptor ( $\sigma$ ) with selectivity for sigma-1 (IC<sub>50</sub> = 1.5 nM) over sigma-2 (IC<sub>50</sub> = 85 nM).<sup>1,2</sup> NE-100 suppressed ischemia-induced neuronal cell death in mice *via* upregulation of GRP78 through the ATF6 pathway resulting in suppression of ER stress-induced cell death in a sigma-1-independent manner.<sup>3</sup>

- 1) Okuyama et al. (1994), NE-100, a novel sigma receptor ligand: in vivo tests; Life Sci. 53 PL285
- 2) Chaki et al. (1994)), NE-100,a novel potent sigma ligand, preferentially binds to sigma 1 binding sites in guinea pig brain; Eur.J.Pharmacol. **251** R1
- 3) Ono et al. (2013), A sigma-1 receptor antaqonist (NE-100) prevents tunicamycin-induced cell death via GRP78 induction in hippocampal cells; Biochem.Biophys.Res.Commun. **434** 904

## PHYSICAL DATA

Molecular Weight: 391.97

Molecular Formula:  $C_{23}H_{33}NO_2 \cdot HCI$ Purity: >98% by HPLC

NMR: Conforms

Solubility: Water (up to 10mg/mL), DMSO (>25 mg/mL)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase.

Solutions in DMSO or water may be stored at -20°C for up to 3 months.

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