



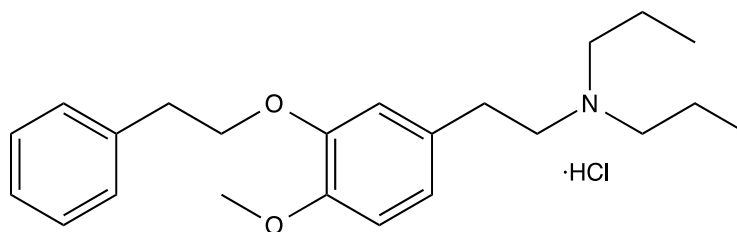
**Catalog # 10-4200**

**NE-100**

4-Methoxy-3-(2-phenylethoxy)-N,N-dipropylbenzeneethanamine hydrochloride

149409-57-4

Lot # FBS1061



NE-100 is potent inhibitor of the sigma receptor ( $\sigma$ ) with selectivity for sigma-1 ( $IC_{50} = 1.5$  nM) over sigma-2 ( $IC_{50} = 85$  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 antagonist (NE-100) prevents tunicamycin-induced cell death via GRP78 induction in hippocampal cells*; Biochem.Biophys.Res.Comm. **434** 904

### **PHYSICAL DATA**

Molecular Weight: 391.97  
Molecular Formula:  $C_{23}H_{33}NO_2 \cdot HCl$   
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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**