Product Datasheet

TMPH hydrochloride

Catalog No. **BP-02363A** · CAS **849461-91-2** · Form **salt · hydrochloride** · Physical state **solid** · Version **1.0** · Revision **2026-09-10**

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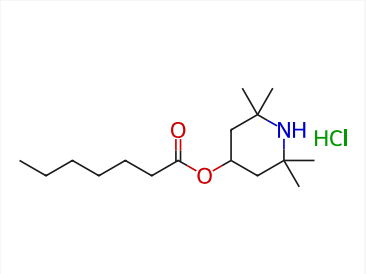
Target	Research area
nAChR	**Neurological Disease**

Molecular formula	**$C_{16}H_{32}ClNO_2$**
Molecular weight	**305.8840**

STRUCTURE



DESCRIPTION

nAChR-IN-1 (hydrochloride) is a tetramethylpiperidine heptanoate, a selective nicotinic acetylcholine receptor (nAChR) inhibitor that inhibits nAChRs lacking α5, α6, or β3 subunits. nAChR-IN-1 has the effect of preventing nerve disorder, can be used for nicotinic acetylcholine receptor dysfunction or neurological disorders research.

BIOLOGICAL ACTIVITY

TMPH hydrochloride is a potent non-competitive antagonist of neuronal nicotinic ACh receptors (nAChRs). Produces long-lasting inhibition of neuronal nAChRs formed by the combination of the most abundant α and β subunits (i.e. α3, α4 and β2, β4 respectively). Displays little inhibition of muscle-type (α1β1γδ) or α7 receptors.

SOLUBILITY

Soluble in DMSO

REFERENCES

[1]. Papke RL, et, al. Compositions et methodes d'inhibition selective des recepteurs nicotiniques de l'acetylcholine. WO2005032479A2