

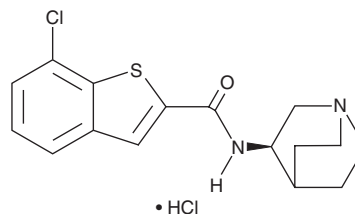
# PRODUCT INFORMATION



## EVP-6124 (hydrochloride)

Item No. 30073

**CAS Registry No.:** 550999-74-1  
**Formal Name:** N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-7-chloro-benzo[b]thiophene-2-carboxamide, monohydrochloride  
**MF:** C<sub>16</sub>H<sub>17</sub>ClN<sub>2</sub>OS • HCl  
**FW:** 357.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 244, 281 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

EVP-6124 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the EVP-6124 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. EVP-6124 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of EVP-6124 (hydrochloride) in ethanol is approximately 20 mg/ml and 30 mg/ml in DMSO and DMF.

EVP-6124 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EVP-6124 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. EVP-6124 (hydrochloride) has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

EVP-6124 is a partial agonist of α7 subunit-containing nicotinic acetylcholine receptors (nAChRs; IC<sub>50</sub> = 22.38 nM).<sup>1</sup> It is 1,000-fold selective for α7 subunit-containing nAChRs over α4β2 subunit-containing nAChRs at 10 μM, as well as a panel of 60 peptide and nonpeptide receptors, ion channels, and transporters. EVP-6124 induces inward currents in *Xenopus* oocytes expressing human α7 subunit-containing nAChRs (EC<sub>50</sub> = 0.16 μM). *In vivo*, EVP-6124 (0.1, 0.3, and 1 mg/kg) reverses scopolamine-induced deficits in the novel object recognition task and prevents natural forgetting of a familiar object in rats. It reduces premature responding, a measure of impulsivity, by low-attentive but not high-attentive female rats in the 5-choice serial reaction time test (5CSRTT).<sup>2</sup>

### References

1. Prickaerts, J., van Goethem, N.P., Chesworth, R., *et al.* EVP-6124, a novel and selective α7 nicotinic acetylcholine receptor partial agonist, improves memory performance by potentiating the acetylcholine response of α7 nicotinic acetylcholine receptors. *Neuropharmacology* **62(2)**, 1099-1110 (2012).
2. Hayward, A., Adamson, L., and Neill, J.C. Partial agonism at the α7 nicotinic acetylcholine receptor improves attention, impulsive action and vigilance in low attentive rats. *Eur. Neuropsychopharmacol.* **27(4)**, 325-335 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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