PRODUCT INFORMATION



NS 3861

Item No. 37406

CAS Registry No.: 216853-59-7

Formal Name: 3-(3-bromo-2-thienyl)-8-methyl-

8-azabicyclo[3.2.1]oct-2-ene

MF: C₁₂H₁₄BrNS FW: 284.2 **Purity:** ≥98% Supplied as: A 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

NS 3861 is supplied as a solid. A stock solution may be made by dissolving the NS 3861 in the solvent of choice, which should be purged with an inert gas. NS 3861 is soluble in methanol, ethanol, and DMSO.

Description

NS 3861 is a neuronal nicotinic acetylcholine receptor (nAChR) agonist.¹ It induces inward currents in patch-clamp assays using X. laevis oocytes expressing recombinant human $\alpha 3\beta 2$ - or $\alpha 3\beta 4$ subunit-containing nAChR receptors (EC₅₀s = 1.6 and 1 μ M, respectively). In vivo, NS 3861 (0.1 mg/kg) increases the number of fecal pellets expelled in mice exposed to long-term, but not short-term, morphine injections.²

References

- 1. Harpsøe, K., Hald, H., Timmermann, D.B., et al. Molecular determinants of subtype-selective efficacies of cytisine and the novel compound NS3861 at heteromeric nicotinic acetylcholine receptors. J. Biol. Chem. 288(4), 2559-2570 (2013).
- 2. Gade, A.R., Kang, M., Khan, F., et al. Enhanced sensitivity of α3β4 nicotinic receptors in enteric neurons after long-term morphine: Implication for opioid-induced constipation. J. Pharmacol. Exp. Ther. 357(3), 520-528 (2016).

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

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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