

Product Datasheet

A-867744

Catalog No. **BP-02381** · CAS **1000279-69-5** · Form **free base** · Physical state **solid** · Color **White to yellow** · Version **1.0** · Revision **2026-09-11**

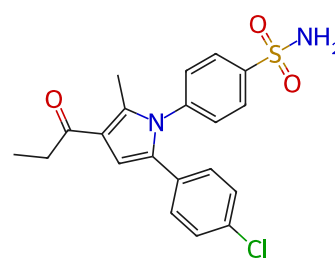
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Target nAChR	Research area Neurological Disease
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Molecular formula **C₂₀H₁₉ClN₂O₃S**

Molecular weight **402.8940**

STRUCTURE



DESCRIPTION

A-867744 is a highly potent and selective type II positive allosteric modulator (PAM) of the $\alpha 7$ nicotinic acetylcholine receptors (nAChR) with an EC₅₀ of 1.0 μ M.

BIOLOGICAL ACTIVITY

A 867744 is a positive allosteric modulator of $\alpha 7$ nAChRs (IC₅₀ values are 0.98 and 1.12 μ M for human and rat $\alpha 7$ receptor ACh-evoked currents respectively, in *X. laevis* oocytes). Displays no activity at 5-HT₃A, $\alpha 3\beta 4$ or $\alpha 4\beta 2$ nAChRs. Brain penetrant.

SOLUBILITY

Soluble in DMSO

In vitro DMSO : ≥ 100 mg/mL

REFERENCES

- [1] Ramin Faghih, et al. Discovery of 4-(5-(4-chlorophenyl)-2-methyl-3-propionyl-1H-pyrrol-1-yl)benzenesulfonamide (A-867744) as a novel positive allosteric modulator of the $\alpha 7$ nicotinic acetylcholine receptor
- [2] Joseph Newcombe, et al. Diversity of Nicotinic Acetylcholine Receptor Positive Allosteric Modulators Revealed by Mutagenesis and a Revised Structural Model
- [3] John Malysz, et al. In vitro pharmacological characterization of a novel allosteric modulator of $\alpha 7$ neuronal acetylcholine receptor, 4-(5-(4-chlorophenyl)-2-methyl-3-propionyl-1H-pyrrol-1-yl)benzenesulfonamide (A-867744), exhibiting unique pharmacological profile
- [4] John Malysz, et al. In vitro pharmacological characterization of a novel selective $\alpha 7$ neuronal nicotinic acetylcholine receptor agonist ABT-107

[5] Krisztina Pesti, et al. Type I-like behavior of the type II $\alpha 7$ nicotinic acetylcholine receptor positive allosteric modulator A-867744

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