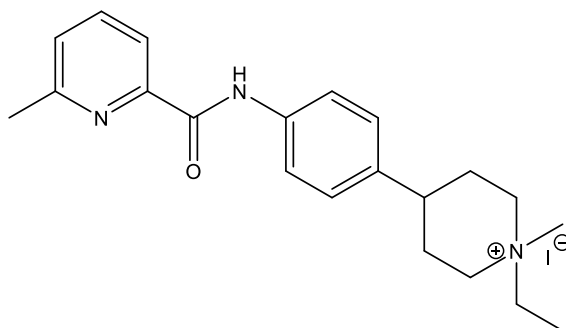


Catalog #10-4330

GAT2711

1-Ethyl-1-methyl-4-(4-(6-methylpicolinamido)phenyl)piperazin-1-ium Iodide

Lot # FBA9207



GAT2711 is a novel full agonist of the $\alpha 9$ nicotinic acetylcholine receptor ($EC_{50} = 230$ nM; EC_{50} for $\alpha 9\alpha 10 = 990$ nM). It was 340-fold selective over the $\alpha 7$ receptor. GAT2711 significantly and dose-dependently inhibited the BzATP-induced release of the pro-inflammatory cytokine IL-1 β in THP-1 cells ($IC_{50} = 0.5$ μ M). It fully attenuated inflammatory pain in mice in an $\alpha 7$ nAChR-independent manner. $\alpha 9$ nAChR agonists represent a novel approach to treating inflammatory and/or neuropathic pain.

- 1) Andleeb *et al.* (2024), *Explorations of Agonist Selectivity for the $\alpha 9^*$ nAChR with Novel Substituted Carbamoyl/Amido/Heteroaryl Dialkylpiperazinium Salts and Their Therapeutic Implications in Pain and Inflammation*; J. Med. Chem. **67** 8642

PHYSICAL DATA

Molecular Weight:	465.38
Molecular Formula:	C ₂₁ H ₂₈ IN ₃ O
Purity:	98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (at least 40 mg/mL)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO 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.

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