

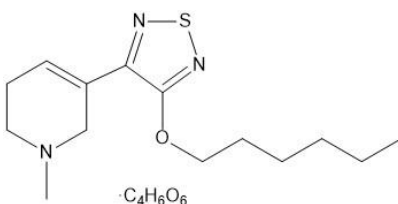


Catalog # 10-5112
Xanomeline tartrate

CAS# 152854-19-8

3-[4-(Hexyloxy)-1,2,5-thiadiazol-3-yl]-1,2,5,6-tetrahydro-1-methylpyridine tartrate;
LY246708 tartrate

Lot # X109238



A functionally-selective M1 muscarinic receptor agonist, EC₅₀=0.3, 92.5, 5, 52 and 42 nM for M1, M2, M3, M4 and M5 respectively.^{1,2} Displays positive cognitive and behavioral effects in schizophrenia and Alzheimer's disease.³ Suppresses proinflammatory cytokine responses and improves survival in sepsis.⁴ Displays potent analgesic activity in rodent models of chronic inflammatory and neuropathic pain.⁵

- 1) Heinrich *et al.* (2009), *Pharmacological Comparison of Muscarinic Ligands: Historical Versus more Recent Muscarinic M1-preferring Receptor Agonists*; Eur. J. Pharmacol., **605** 53
- 2) Jakubik *et al.* (2008), *Importance and prospects for design of selective muscarinic agonists*; Physiol. Res., **57 Suppl. 3** S39
- 3) Bender *et al.* (2017), *Classics in Chemical Neuroscience: Xanomeline*; ACS Chem. Neurosci, **8** 435
- 4) Rosas-Ballina *et al.* (2015), *Xanomeline Suppresses Excessive Pro-Inflammatory Cytokine responses Through Neural Signal-Mediated Pathways and Improves Survival in Lethal Inflammation*; Brain Behav. Immun., **44** 19
- 5) Martino *et al.* (2011), *The M1/M4 Preferring Agonist Xanomeline Is Analgesic in Rodent Models of Chronic Inflammatory and Neuropathic Pain via Central Site of Action*; Pain, **152** 2852

PHYSICAL DATA

Molecular Weight: 431.50
Molecular Formula: C₁₄H₂₃N₃OS
Purity: 98% by HPLC
NMR: (Conforms)
Solubility: DMSO (up to 45 mg/ml), Water (up to 70 mg/ml)
Physical Description: Off-white solid
Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 2 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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