

Product Data Sheet

Product Name: N-Desmethyl xanomeline

Cat. No.: GC79779

Chemical Properties

Cas. No. 131986-96-4

Formula $C_{13}H_{21}N_3OS$

M.Wt 267.39

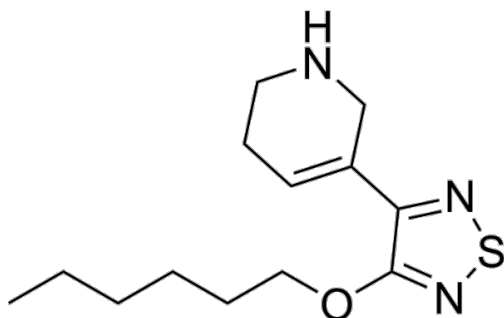
Solubility

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

N-Desmethyl xanomeline is a pharmacologically active metabolite of Xanomeline. N-Desmethyl xanomeline binds to muscarinic, serotonergic, histaminergic and dopaminergic receptors. N-Desmethyl xanomeline can be used for the research of schizophrenia [1].

In Vitro, N-Desmethyl xanomeline (0.1 nM-10 µM) exhibits a complex polypharmacological profile with potent binding to σ_1 , 5-HT_{2B}, 5-HT_{1D}, 5-HT₇, and muscarinic receptors (K_i values range from 6.2 nM to 219 nM)[1]. N-Desmethyl xanomeline (10 µM) exhibits potential agonism at multiple

Caution: Product has not been fully validated for medical applications. For research use only.

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muscarinic, serotonergic, and histaminergic GPCRs^[1]. N-Desmethyl xanomeline acts as a full or partial agonist at 5-HT_{1D} (potencies 17-130 nM) and 5-HT_{1A} (EC₅₀ = 2.20 μ M) receptors, and weak partial agonist at 5-HT_{2A}, 5-HT_{2C}, H₃, and H₄ receptors^[1].

References:

[1]. Kensuke Sakamoto, et al. The polypharmacological profiles of xanomeline and N-desmethylxanomeline. bioRxiv. November 21, 2025.

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