

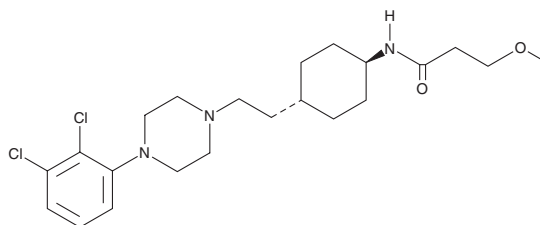
PRODUCT INFORMATION



Dopamine D₃ Receptor Agonist 13a

Item No. 38382

CAS Registry No.: 2899250-94-1
Formal Name: N-[trans-4-[2-[4-(2,3-dichlorophenyl)-1-piperazinyl]ethyl]cyclohexyl]-3-methoxy-propanamide
MF: C₂₂H₃₃Cl₂N₃O₂
FW: 442.4
Purity: ≥95%
UV/Vis.: λ_{max}: 220 nm
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

Dopamine D₃ receptor agonist 13a is supplied as a solid. A stock solution may be made by dissolving the dopamine D₃ receptor agonist 13a in the solvent of choice, which should be purged with an inert gas. Dopamine D₃ receptor agonist 13a is soluble in the organic solvent ethanol. The solubility of dopamine D₃ receptor agonist 13a in ethanol is approximately 3 mg/ml, respectively. It is soluble in dimethyl formamide.

Description

Dopamine D₃ receptor agonist 13a is a dopamine D₃ receptor agonist.¹ It selectively binds to dopamine D₃ over dopamine D₁, D₂, and D₄ receptors (K_is = 0.14, 4,600, 2.85, and 756 nM, respectively), as well as the serotonin (5-HT) receptor subtypes 5-HT_{1A}, 5-HT_{2A}, 5-HT_{2B}, and 5-HT_{2C} (K_is = 6, 54, 1.47, and 252 nM, respectively), however, it is a partial agonist of dopamine D₂ receptors (EC₅₀ = 2.26 nM in a G protein recruitment assay) and acts as an antagonist at dopamine D₃ receptors (IC₅₀ = 4.62 nM). Dopamine D₃ receptor agonist 13a (3 mg/kg) reduces cocaine self-administration in rats.

Reference

1. Gogaroiu, E.S., Vogt, C.D., Sanchez, J., et al. Dopamine D₃/D₂ receptor ligands based on cariprazine for the treatment of psychostimulant use disorders that may be dual diagnosed with affective disorders. *J. Med. Chem.* **66**(3), 1809-1834 (2023).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

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