

Asenapine (hydrochloride)

Catalog No: tcsc1053



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1412458-61-7

Formula:

$C_{17}H_{17}Cl_2NO$

Pathway:

GPCR/G Protein;Neuronal Signaling;Neuronal Signaling;GPCR/G Protein

Target:

Dopamine Receptor;Dopamine Receptor;5-HT Receptor;5-HT Receptor

Purity / Grade:

>98%

Solubility:

DMSO : 50 mg/mL (155.17 mM; Need ultrasonic)

Observed Molecular Weight:

322.23

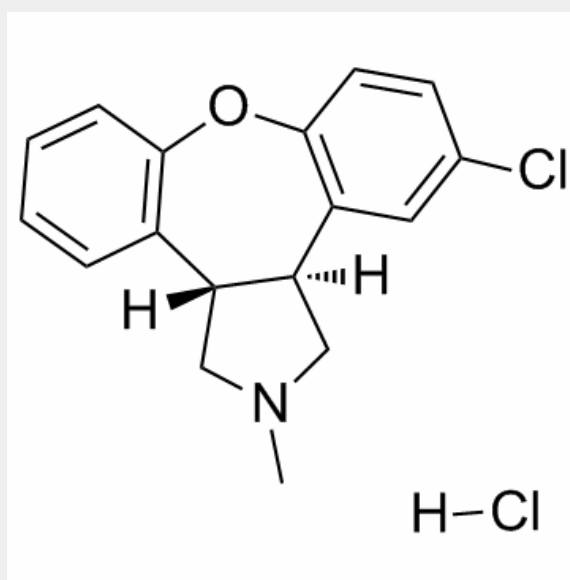
Product Description

Asenapine maleate, an antipsychotic, is a **5-HT** (1A, 1B, 2A, 2B, 2C, 5A, 6, 7) and **Dopamine (D₂, D₃, D₄)** receptor antagonist with **K_i** values of 0.03-4.0 nM for 5-HT and 1.3, 0.42, 1.1 nM for Dopamine receptor, respectively.

In Vitro:

Relative to its D2 receptor affinity, Asenapine has a higher affinity for 5-HT_{2C}, 5-HT_{2A}, 5-HT_{2B}, 5-HT₇, 5-HT₆, α_{2B} and D3 receptors, suggesting stronger engagement of these targets at therapeutic doses. Asenapine behaves as a potent antagonist (pK_B) at 5-HT_{1A} (7.4), 5-HT_{1B} (8.1), 5-HT_{2A} (9.0), 5-HT_{2B} (9.3), 5-HT_{2C} (9.0), 5-HT₆ (8.0), 5-HT₇ (8.5), D2 (9.1), D3 (9.1), α_{2A} (7.3), α_{2B} (8.3), α_{2C} (6.8) and H1 (8.4) receptors^[2].

In Vivo: Asenapine is an atypical antipsychotic that is currently available for the treatment of schizophrenia and bipolar I disorder. Asenapine may have superior therapeutic effect on anxiety symptoms than other agents in rats^[3]. Asenapine has anxiolytic-like effects in the EPM and the defensive marble burying tests in mice^[4].



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