

# Asenapine (maleate)

Catalog No: tcsc0859



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



## Specifications

**CAS No:**

85650-56-2

**Formula:**

$C_{21}H_{20}ClNO_5$

**Pathway:**

Neuronal Signaling;GPCR/G Protein

**Target:**

5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 25 mg/mL (62.21 mM; Need ultrasonic); H2O : 6.25 mg/mL (15.55 mM; Need ultrasonic and warming)

**Alternative Names:**

Org 5222 maleate

### Observed Molecular Weight:

401.84

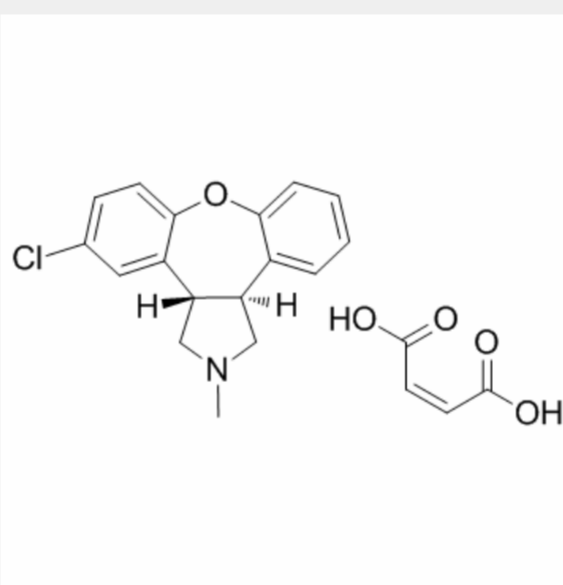
## Product Description

Asenapine maleate is a **5-HT** (1A, 1B, 2A, 2B, 2C, 5A, 6, 7) and **D2** antagonist with **K<sub>i</sub>** values of 0.03-4.0 nM, 1.3nM, respectively, and an antipsychotic.

IC50 & Target: K<sub>i</sub>: 0.03-4.0 nM (5-HT), 1.3 nM (D2)<sup>[1]</sup>.

**In Vitro:** Relative to its D2 receptor affinity, asenapine has a higher affinity for 5-HT<sub>2C</sub>, 5-HT<sub>2A</sub>, 5-HT<sub>2B</sub>, 5-HT<sub>7</sub>, 5-HT<sub>6</sub>, α<sub>2B</sub> and D3 receptors, suggesting stronger engagement of these targets at therapeutic doses. Asenapine behaves as a potent antagonist (pK<sub>B</sub>) at 5-HT<sub>1A</sub> (7.4), 5-HT<sub>1B</sub> (8.1), 5-HT<sub>2A</sub> (9.0), 5-HT<sub>2B</sub> (9.3), 5-HT<sub>2C</sub> (9.0), 5-HT<sub>6</sub> (8.0), 5-HT<sub>7</sub> (8.5), D2 (9.1), D3 (9.1), α<sub>2A</sub> (7.3), α<sub>2B</sub> (8.3), α<sub>2C</sub> (6.8) and H1 (8.4) receptors<sup>[2]</sup>.

**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<sup>[3]</sup>. Asenapine has anxiolytic-like effects in the EPM and the defensive marble burying tests in mice<sup>[4]</sup>.



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