N-Desmethylclozapine is an antagonist of serotonin (5-HT) receptor subtype 5-HT2C (IC50: 7.1 nM). It also is an antagonist at dopamine D4 receptors, an agonist at δ-opioid receptors.

Storage: 2 years -80°C in solvent; 3 years -20°C powder;

<table>
<thead>
<tr>
<th>Solubility</th>
<th>DMSO</th>
<th>30 mg/mL</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Ethanol</td>
<td>30 mg/mL</td>
</tr>
</tbody>
</table>

(< 1 mg/mL refers to the product slightly soluble or insoluble)

Receptor (IC50)

| 5-HT2C | 7.1 nM |

In vitro Activity
N-desmethylclozapine antagonized 5-HT-stimulated phosphoinositide hydrolysis with IC50 values of 29.4 nM [1]. N-desmethylclozapine exhibited slight agonistic effects on the M1 mAChR and agonistic properties at the 5-HT1A receptor in the cerebral cortex and hippocampus. This compound also behaved as an agonist at the δ-opioid receptor in the cerebral cortex and the striatum [2]. Muscarinic agonist activity of N-desmethylclozapine was higher than that of clozapine, higher in excitatory neurons than in inhibitory neurons, sensitive to pirenzepine, and partially masked when co-applied with clozapine [3].

In vivo Activity
NDMC (3-30mg/kg) decreased exploratory locomotor activity in a dose-dependent manner, and the reduced locomotor activity was significantly antagonized by scopolamine at doses of 0.1 and 0.3mg/kg. NDMC (10-30mg/kg) dose-dependently increased prepulse inhibition (PPI) in DBA/2J mice [4].

Animal Experiment

Animal Model:

Reference
under the recommended storage conditions. Our products may be shipped under different conditions as many of them are stable in the short-term at higher or even room temperatures. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, please follow the storage recommendations on the product datasheet.