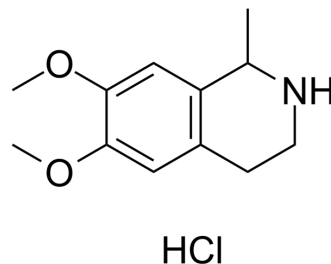


## Salsolidine hydrochloride

<b>Cat. No.:</b>	HY-22385A
<b>CAS No.:</b>	63283-42-1
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>18</sub> ClNO <sub>2</sub>
<b>Molecular Weight:</b>	243.73
<b>Target:</b>	Monoamine Oxidase
<b>Pathway:</b>	Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Salsolidine hydrochloride, a tetrahydroisoquinoline alkaloid, acts as a stereoselective competitive MAO A (monoamine oxidase A) inhibitor.
<b>IC<sub>50</sub> &amp; Target</b>	MAO A <sup>[1]</sup>
<b>In Vitro</b>	<p>Salsolidine hydrochloride is a tetrahydroisoquinoline alkaloid, acts as a stereoselective competitive MAO A inhibitor. The R-salsolidine is more active against MAO A than S-salsolidine (K<sub>i</sub>=6 μM and 186 μM)<sup>[1]</sup>.</p> <p>Salsolidine weakly inhibits the binding of δ-receptor, with a K<sub>i</sub> of &gt;100 μM<sup>[2]</sup>.</p> <p>Salsolidine has the potential of inhibiting acetylcholinesterase and butyrylcholinesterase<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Bembek ME, et al. Inhibition of monoamine oxidases A and B by simple isoquinoline alkaloids: racemic and optically active 1,2,3,4-tetrahydro-, 3,4-dihydro-, and fully aromatic isoquinolines. *J Med Chem.* 1990 Jan;33(1):147-52.
- [2]. Airaksinen MM, et al. Binding of beta-carbolines and tetrahydroisoquinolines by opiate receptors of the delta-type. *Acta Pharmacol Toxicol (Copenh).* 1984 Nov;55(5):380-5.
- [3]. Tundis R, et al. A potential role of alkaloid extracts from *Salsola* species (Chenopodiaceae) in the treatment of Alzheimer's disease. *J Enzyme Inhib Med Chem.* 2009 Jun;24(3):818-24.

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

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