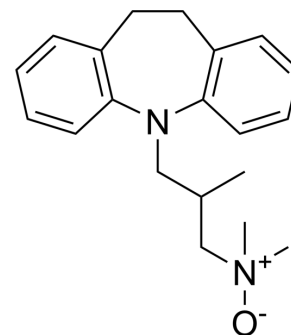


Trimipramine N-oxide

Cat. No.:	HY-147333
CAS No.:	14171-70-1
Molecular Formula:	C ₂₀ H ₂₆ N ₂ O
Molecular Weight:	310.43
Target:	Drug Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Trimipramine N-oxide is an active metabolite of the tricyclic antidepressant trimipramine. Trimipramine N-oxide inhibits the human monoamine transporters for noradrenaline (hNAT), serotonin (hSERT), dopamine (hDAT) and the human organic cation transporters (hOCT1 and hOCT2) with IC ₅₀ s of 11.7, 3.59, 9.4, 9.35 and 27.4 nM, respectively. Trimipramine N-oxide can be used for the research of depression and anxiety ^[1] .								
IC₅₀ & Target	IC ₅₀ : 3.59 nM (hSERT), 9.35 nM (hOCT1), 9.4 nM (hDAT), 11.7 nM (hNAT), 27.4 (hOCT2) ^[1]								
In Vitro	<p>Trimipramine N-oxide (0-30 μM; 48 h) inhibits hNAT, hSERT, hDAT, hOCT1 and hOCT2 in HEK293 cells^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HEK293 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-30 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Dose-dependently inhibited hNAT, hSERT, hDAT, hOCT1 and hOCT2 with IC₅₀s of 11.7, 3.59, 9.4, 9.35 and 27.4 nM in HEK293 cells, respectively.</td> </tr> </table>	Cell Line:	HEK293 cells	Concentration:	0-30 μM	Incubation Time:	48 hours	Result:	Dose-dependently inhibited hNAT, hSERT, hDAT, hOCT1 and hOCT2 with IC ₅₀ s of 11.7, 3.59, 9.4, 9.35 and 27.4 nM in HEK293 cells, respectively.
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REFERENCES

[1]. Haenisch B, et al. Inhibitory potencies of trimipramine and its main metabolites at human monoamine and organic cation transporters. *Psychopharmacology (Berl)*. 2011 Sep;217(2):289-95.

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

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