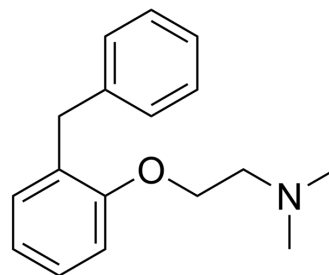


## Phenyltoloxamine

<b>Cat. No.:</b>	HY-B1733
<b>CAS No.:</b>	92-12-6
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>21</sub> NO
<b>Molecular Weight:</b>	255.35
<b>Target:</b>	Histamine Receptor; Sigma Receptor; Cytochrome P450
<b>Pathway:</b>	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling; Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Phenyltoloxamine (Bistramin) is an antihistamine agent with sedative and analgesic effects. Phenyltoloxamine also has potent Sigma-1 receptor binding affinity (K <sub>i</sub> : 160 nM) <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	<p><b>Caution: Product has not been fully validated for medical applications. For research use only.</b></p> <p>Sigma-1 Receptor 160 nM (K<sub>i</sub>)</p> <p>Phone: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com</p> <p>Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA</p>
<b>In Vitro</b>	<p>Phenyltoloxamine (10-50 μM, 24 h) demonstrates cytotoxicity in EVSA-T cells<sup>[2]</sup>.</p> <p>Phenyltoloxamine exhibits potent Sigma 1 Receptor (S1R) binding affinity with a K<sub>i</sub> value of 160 nM<sup>[3]</sup>.</p> <p>Phenyltoloxamine (100 μM) inhibits human liver microsomal CYP2D6 enzyme by 99.0%<sup>[4]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Justin B.Hoekstra. Pharmacological Properties of a New Antihistaminic Agent, Phenyltoloxamine (Bristamin). Journal of the American Pharmaceutical Association (Scientific ed.). 1953, 42 (10), 587-593.
- [2]. Brandes LJ, et al. Evidence that the antiestrogen binding site is a histamine or histamine-like receptor. Biochem Biophys Res Commun. 1985 Jan 31;126(2):905-10.
- [3]. Youyi Peng, et al. Comprehensive 3D-QSAR Model Predicts Binding Affinity of Structurally Diverse Sigma 1 Receptor Ligands. J Chem Inf Model. 2019 Jan 28;59(1):486-497.
- [4]. Sellers, et al. Use of inhibitors of CYP2D6 enzyme for the prevention of drug abuse. Patent, US6124282.