# Nitroxazepine

**Cat. No.:** HY-101684  
**CAS No.:** 47439-36-1  
**Molecular Formula:** C_{18}H_{19}N_{3}O_{4}  
**Molecular Weight:** 341.36  
**Target:** Serotonin Transporter  
**Pathway:** Neuronal Signaling  
**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.

## BIOLOGICAL ACTIVITY

<table>
<thead>
<tr>
<th>Description</th>
<th>Nitroxazepine is a tricyclic antidepressant (TCA) for the research of depression. Nitroxazepine acts as a serotonin-norepinephrine reuptake inhibitor.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IC_{50} &amp; Target</strong></td>
<td>serotonin-norepinephrine reuptake</td>
</tr>
</tbody>
</table>

### In Vitro

The in vitro effect of Nitroxazepine (Sintamil), as a modulator alone and in combination with hydroxyurea (HU), on cytotoxicity is studied in 16 cases of human chronic myeloid leukemia (CML). The cytotoxicity of the drugs as a function of the exposure dose (HU, 100 \( \mu \)M; Nitroxazepine, 10 \( \mu \)g/mL) and the exposure time (1 h) to the agent is investigated.

Cytotoxicity is evaluated as the inhibition of incorporation of \[^{3}H\]-methyl]thymidine in the nucleic acids of CML cells. Cytotoxicity of HU is greatly enhanced (P<0.001) by 1 h exposure of the CML cells to Nitroxazepine. The present data indicate that Nitroxazepine potentiates the cytotoxic activity of HU in CML cells\(^{[1]}\). Nitroxazepine is indicated for the treatment of nocturnal enuresis. Nitroxazepine has similar effects to imipramine, but with certain advantages, such as lower anticholinergic side effects.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES


---

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

Tel: 609-228-6898  
Fax: 609-228-5909  
E-mail: tech@MedChemExpress.com  
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA