Nitroxazepine

**Cat. No.:** HY-101684  
**CAS No.:** 47439-36-1  
**Molecular Formula:** C₁₈H₁₉N₃O₄  
**Molecular Weight:** 341.36  
**Target:** Serotonin Transporter  
**Pathway:** Neuronal Signaling  
**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.  
**Solubility:** DMSO  

* "<1 mg/mL" means slightly soluble or insoluble. "≥" means soluble, but saturation unknown.

**PREPARING STOCK SOLUTIONS**

<table>
<thead>
<tr>
<th>Volume</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td></td>
<td>2.9295 mL</td>
<td>14.6473 mL</td>
<td>29.2946 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.5859 mL</td>
<td>2.9295 mL</td>
<td>5.8589 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.2929 mL</td>
<td>1.4647 mL</td>
<td>2.9295 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

**BIOLOGICAL ACTIVITY**

**Description**  
Nitroxazepine is a tricyclic antidepressant (TCA) for the treatment of depression. Nitroxazepine acts as a serotonin-norepinephrine reuptake inhibitor.

**IC₅₀ & Target**  
serotonin-norepinephrine reuptake

**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 μM; Nitroxazepine, 10 μg/mL) and the exposure time (1 h) to the agent is investigated. Cytotoxicity is evaluated as the inhibition of incorporation of [³H-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.

**REFERENCES**

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