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 COA.

Solvent & Solubility

<table>
<thead>
<tr>
<th>In Vitro</th>
<th>10 mM in DMSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing Stock Solutions</td>
<td><strong>Solvent Concentration</strong></td>
</tr>
<tr>
<td>1 mM</td>
<td>2.9295 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5859 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2929 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