SMND-309

Cat. No.: HY-13056
CAS No.: 1065559-56-9
Molecular Formula: C_{18}H_{14}O_{8}
Molecular Weight: 358.3
Target: Drug Metabolite
Pathway: Metabolic Enzyme/Protease
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: ≥ 3.7 mg/mL (10.33 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.7910 mL</td>
<td>13.9548 mL</td>
<td>27.9096 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5582 mL</td>
<td>2.7910 mL</td>
<td>5.5819 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2791 mL</td>
<td>1.3955 mL</td>
<td>2.7910 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
SMND-309 is a metabolite of salvianolic acid B, and exhibits neuroprotective effects in cultured neurons and in permanent middle cerebral artery occlusion rats\(^1\)[2].

In Vivo
SMND-309 (2.5-10 mg/kg; oral intragastric; once a day; for 4 weeks; male Sprague-Dawley rats) treatment ameliorates liver function and decreases the elevation of serum hyaluronic acid, laminin, procollagen type III levels and hydroxyproline content in liver tissue. SMND-309 also decreases the elevation in the malondialdehyde level and restored the decrease in superoxide dismutase and glutathione peroxidase activities. SMND-309 treatment reduces the liver damage and the liver fibrosis grade. SMND-309 treatment powerfully down-regulated the expression of connective tissue growth factor (CTGF) in serum and liver\(^1\).

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

Animal Model: Male Sprague-Dawley rats (180-200 g) with carbon tetrachloride\(^1\)
Dosage: 2.5 mg/kg, 5 mg/kg and 10 mg/kg

Administration: Oral intragastric; once a day; for 4 weeks

Result: The antifibrotic mechanisms might be associated with its ability to suppress the expression of CTGF as well as scavenge lipid peroxidation products and increase endogenous antioxidant enzyme activity.

REFERENCES

