**WST-1**

Cat. No.: HY-136976  
CAS No.: 150849-52-8  
Molecular Formula: $C_{19}H_{11}IN_5NaO_8S_2$  
Molecular Weight: 651.34  
Target: Others  
Pathway: Others  
Storage: Please store the product under the recommended conditions in the Certificate of Analysis.

**SOLVENT & SOLUBILITY**

**In Vitro**  
DMSO: 25 mg/mL (38.38 mM; ultrasonic and warming and heat to 80°C)  
H$_2$O: < 0.1 mg/mL (ultrasonic; warming; adjust pH to 9 with NaOH; heat to 80°C) (insoluble)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.5353 mL</td>
<td>7.6765 mL</td>
<td>15.3530 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3071 mL</td>
<td>1.5353 mL</td>
<td>3.0706 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1535 mL</td>
<td>0.7676 mL</td>
<td>1.5353 mL</td>
<td></td>
</tr>
</tbody>
</table>

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

**In Vivo**  
1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.5 mg/mL (3.84 mM); Clear solution  
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (3.84 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
WST-1 is a Tetrazolium dye, widely used in the cell viability assays. WST-1 produces a water-soluble formazan product (WST-1 formazan) that occurs at the cell surface in NADPH dependent manner in viable cells$^{[1][2]}$.

**In Vitro**  
WST-1 is used for a wide range of assays that include cell viability, proliferation, plasma membrane electron transport system, superoxide generation, superoxide dismutase, and xanthine oxidase assay$^{[1]}$. A water-soluble formazan dye is produced from the reduction of WST-1 tetrazolium, of which optical density at 450 nm is measured to evaluate cell viability$^{[1]}$.  
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