**BMS-986020**

Cat. No.: HY-100619  
CAS No.: 1257213-50-5  
Molecular Formula: C₉₂H₇₆N₂O₅  
Molecular Weight: 482.53  
Target: LPL Receptor  
Pathway: GPCR/G Protein  
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: ≥ 64 mg/mL (132.63 mM)  
* "≥" means soluble, but saturation unknown.  

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.0724 mL</td>
<td>10.3621 mL</td>
<td>20.7241 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4145 mL</td>
<td>2.0724 mL</td>
<td>4.1448 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2072 mL</td>
<td>1.0362 mL</td>
<td>2.0724 mL</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: ≥ 2.08 mg/mL (4.31 mM); Clear solution  
2. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.08 mg/mL (4.31 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
BMS-986020 is a high-affinity and selective lysophosphatidic acid receptor 1 (LPA1) antagonist[1]. BMS-986020 inhibits bile acid and phospholipid transporters with IC₅₀s of 4.8 µM, 6.2 µM, and 7.5 µM for BSEP, MRP4, and MDR3, respectively[2]. BMS-986020 has the potential for the treatment of idiopathic pulmonary fibrosis (IPF)[3].

**IC₅₀ & Target**  
IC₅₀: 4.8 µM (BSEP); 6.2 µM (MRP4); 7.5 µM (MDR3)[2]

**In Vitro**  
BMS-986020 (0.1-10 nM; pre-incubated) concentration-dependent displacement of [¹⁸F]BMT-083133 binding is observed in LPA₁⁺ cells and lung sections. At 0.1 nM, the percent displacement in healthy mice, bleomycin mice, and
IPF lungs is 18%, 24%, and 31%, respectively. At 10 nM, the percent displacement is 73%, 76%, and 64%, respectively. \([^{18}F]BMT-083133\), a radioligand targeting LPA1 is developed as a translational research tool for assessment of lung LPA1 engagement of BMS-986020 using in vitro autoradiography (ARG)\cite{4}.

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

---

**CUSTOMER VALIDATION**


See more customer validations on www.MedChemExpress.com

---

**REFERENCES**


