**JNJ-38877618**

**Cat. No.:** HY-111050  
**CAS No.:** 943540-74-7  
**Molecular Formula:** C₂₀H₁₂F₂N₆  
**Molecular Weight:** 374.35  
**Target:** c-Met/HGFR  
**Pathway:** Protein Tyrosine Kinase/RTK  
**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: 5 mg/mL (13.36 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.6713 mL</td>
<td>13.3565 mL</td>
<td>26.7130 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5343 mL</td>
<td>2.6713 mL</td>
<td>5.3426 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2671 mL</td>
<td>1.3356 mL</td>
<td>2.6713 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: ≥ 0.5 mg/mL (1.34 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 0.5 mg/mL (1.34 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 0.5 mg/mL (1.34 mM); Clear solution

### BIOLOGICAL ACTIVITY

**Description**

JNJ-38877618 is a potent, highly selective, orally bioavailable Met kinase inhibitor with IC₅₀ of 2 and 3 nM for wild type and mutant Met, respectively.

**IC₅₀ & Target**

IC₅₀: 2 nM (wt Met), 2 nM (mutant Met)[¹]

**In Vitro**

OMO-1 (formerly JNJ-38877618), is a potent, highly selective, orally bioavailable Met kinase inhibitor with nM binding
affinity ($K_d=1.4$ nM) and enzyme inhibitory activity against wt and M1268T mutant Met (2 and 3 nM IC$_{50}$). Met inhibitory effects are assessed in proliferation, colony formation and motility assays. JNJ-38877618 displays nM potency against Met Ampl/mutant and therapy resistant models[1].

| In Vivo | JNJ-38877618 induces complete inhibition of tumor growth in 3 models: the SNU5 Met amp gastric, U87-MG HGF autocrine glioblastoma and Hs746T Met exon 14 skipping mutant gastric cancer. JNJ-38877618 induces regression of large Met amplified EBC-1 SqNSCLC where JNJ-38877618 leads to dose- and time-dependent inhibition of Met kinase activation, with the duration of target shut down considerably exceeding plasma exposure times. Combination treatments are well tolerated and improved EGFR targeted therapy[1]. |

REFERENCES