## PFE-360

**Cat. No.:** HY-120085  
**CAS No.:** 1527475-61-1  
**Molecular Formula:** C₁₆H₁₆N₆O  
**Molecular Weight:** 308.34  
**Target:** LRRK2  
**Pathway:** Autophagy  
**Storage:**  
- Powder  
  - -20°C: 3 years  
  - 4°C: 2 years  
- In solvent  
  - -80°C: 6 months  
  - -20°C: 1 month  

### SOLVENT & SOLUBILITY

#### In Vitro

<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>Solvent Concentration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>3.2432 mL</td>
<td>16.2159 mL</td>
<td>32.4317 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6486 mL</td>
<td>3.2432 mL</td>
<td>6.4863 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3243 mL</td>
<td>1.6216 mL</td>
<td>3.2432 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: ≥ 1.04 mg/mL (3.37 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 1.04 mg/mL (3.37 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 1.04 mg/mL (3.37 mM); Clear solution

### BIOLOGICAL ACTIVITY

**Description**  
PFE-360 (PF-06685360) is a potent, selective, brain penetrated and orally active leucine-rich repeat kinase 2 (LRRK2) inhibitor with a mean IC₅₀ of 2.3 nM in vivo[1][2].

**IC₅₀ & Target**  
IC₅₀: 2.3 nM (LRRK2 in vivo) [1][2].

**In Vivo**  
PFE-360 (4 mg/kg and 7.5 mg/kg, orally, BID, 10-12 weeks) treatment potently decreases the LRRK2-pSer935/total LRRK2 ratio, with no significant adverse effects[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

<table>
<thead>
<tr>
<th>Animal Model</th>
<th>Female Sprague Dawley rats (NTac:SD) weighed 225-250 g[^3].</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage</td>
<td>4 mg/kg and 7.5 mg/kg (pharmacokinetics and pharmacodynamics).</td>
</tr>
<tr>
<td>Administration</td>
<td>Orally BID for 10-12 weeks.</td>
</tr>
<tr>
<td>Result</td>
<td>The LRRK2-pSer935/total LRRK2 ratio was significantly decreased at both 1 h and 12 h after dosing.</td>
</tr>
<tr>
<td></td>
<td>The terminal bodyweights exhibited no significant changes.</td>
</tr>
</tbody>
</table>

**REFERENCES**

[^1]: Marco A.S. Baptista, et al. LRRK2 Kinase Inhibitors of Different Structural Classes Induce Abnormal Accumulation of Lamellar Bodies in Type II Pneumocytes in Non-Human Primates but are Reversible and Without Pulmonary Functional Consequences.
