**Mavoglurant**

Cat. No.: HY-15257  
CAS No.: 543906-09-8  
Molecular Formula: C₁₉H₂₃NO₃  
Molecular Weight: 313.39  
Target: mGluR  
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: ≥ 47 mg/mL (149.97 mM)  
*“≥” means soluble, but saturation unknown.*

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</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></td>
<td>3.1909 mL</td>
<td>15.9546 mL</td>
<td>31.9091 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.6382 mL</td>
<td>3.1909 mL</td>
<td>6.3818 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.3191 mL</td>
<td>1.5955 mL</td>
<td>3.1909 mL</td>
<td></td>
</tr>
</tbody>
</table>

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

**BIOLOGICAL ACTIVITY**

Description  
Mavoglurant is a structurally novel, non-competitive mGluS receptor antagonist, has an IC₅₀ of 30 nM in a functional assay with human mGluR5. IC₅₀ value: 30 nM  
Target: mGluR5  
in vitro: Mavoglurant is a selective non-competitive antagonist which showed efficacy in the treatment of L-dopa induced dyskinesias in Parkinson’s disease and Fragile X mental retardation in proof of principle studies. Mavoglurant is selective over the other mGluR subtypes, iGluRs and a panel of 238 CNS relevant receptors, transporter or enzymes. [1]  
In vivo: Mavoglurant shows an improved pharmacokinetic profile in rat and efficacy in the stress-induced hyperthermia test in mice as compared to the prototypic mGluR5 antagonist MPEP.[1]

**REFERENCES**

[1]. Vranesic I, et al. AFQ056/mavoglurant, a novel clinically effective mGluR5 antagonist: identification, SAR and pharmacological characterization. Bioorg...