Mardepodect hydrochloride

Cat. No.: HY-50098A
CAS No.: 2070014-78-5
Molecular Formula: C₂₅H₂₁ClN₄O
Molecular Weight: 428.91
Target: Phosphodiesterase (PDE)
Pathway: Metabolic Enzyme/Protease
Storage: 4°C, sealed storage, away from moisture
* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro
DMSO: 25 mg/mL (58.29 mM; ultrasonic and warming and heat to 60°C)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
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<td>1 mM</td>
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<td>10 mM</td>
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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: ≥ 3.25 mg/mL (7.58 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 3.25 mg/mL (7.58 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Mardepodect hydrochloride (PF-2545920 hydrochloride) is a potent, orally active and selective PDE10A inhibitor with an IC₅₀ of 0.37 nM, with >1000-fold selectivity over other PDEs. Mardepodect hydrochloride can cross the blood-brain barrier[1][2].

IC₅₀ & Target
IC50: 0.37 nM (PDE10A)[1].

In Vivo
In the conditioned avoidance response assay (CAR), Mardepodect (PF-2545920) is active with an ED₅₀ of 1 mg/kg. Administration of Mardepodect (PF-2545920) to mice causes a dose dependent increase in striatal cGMP[2].

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