Dutogliptin

Cat. No.: HY-10286
CAS No.: 852329-66-9
Molecular Formula: C₁₀H₂₀BN₃O₃
Molecular Weight: 241.1
Target: Dipeptidyl Peptidase
Pathway: Metabolic Enzyme/Protease
Storage: 4°C, stored under nitrogen
  * In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

SOLVENT & SOLUBILITY

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mg</td>
<td>4.1477 mL</td>
</tr>
<tr>
<td>5 mg</td>
<td>20.7383 mL</td>
</tr>
<tr>
<td>10 mg</td>
<td>41.4766 mL</td>
</tr>
</tbody>
</table>

Preparing Stock Solutions

In Vitro DMSO: 300 mg/mL (1244.30 mM; Need ultrasonic)

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: ≥ 7.5 mg/mL (31.11 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 7.5 mg/mL (31.11 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 7.5 mg/mL (31.11 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Dutogliptin (PHX-1149 free base) is an orally available, potent, and selective dipeptidyl peptidase-4 (DPP4) inhibitor for the treatment of type 2 diabetes mellitus.

IC₅₀ & Target
DPP4[^1]

In Vivo
Dutogliptin exhibits low plasma protein binding (11%) and is rapidly absorbed with a T_max of 3-4 h and a half-life of 10-13 h.
Dutogliptin is metabolically stable and does not inhibit or induce the activity of major CYP450s[^2].

[^1]: Source:[1]
[^2]: Source:[2]

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