Droxidopa

Cat. No.: HY-13458
CAS No.: 23651-95-8
Molecular Formula: C₉H₁₁NO₅
Molecular Weight: 213.19
Target: Others
Pathway: Others
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: 1.8 mg/mL (8.44 mM; Need ultrasonic and warming)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>4.6907 mL</td>
<td>23.4533 mL</td>
<td>46.9065 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.9381 mL</td>
<td>4.6907 mL</td>
<td>9.3813 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
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</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Droxidopa (L-DOPS, SM5688) is a synthetic amino acid precursor which acts as a prodrug to the neurotransmitters norepinephrine (noradrenaline) and epinephrine (adrenaline); capable of crossing the protective blood–brain barrier IC50 value: Target: The acute administration of droxidopa in PVL and BDL rats caused a significant and maintained increase in arterial pressure and mesenteric arterial resistance, with a significant decrease of mesenteric arterial and portal blood flow, without changing portal pressure and renal blood flow [1]. L-threo-dihydroxyphenylserine (Droxidopa) is a pro-drug which has a structure similar to noradrenaline, but with a carboxyl group. It has no pressor effects in this form. It can be administered orally, unlike noradrenaline, and after absorption is converted by the enzyme dopa decarboxylase into noradrenaline thus increasing levels of the neurotransmitter which is identical to endogenous noradrenaline [2].

REFERENCES

Caution: Product has not been fully validated for medical applications. For research use only.
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