CXCR2-IN-1

Cat. No.: HY-101022
CAS No.: 1873376-49-8
Molecular Formula: C₁₉₃₉₇₅F₅O₄S
Molecular Weight: 476.35
Target: CXCR
Pathway: GPCR/G Protein; Immunology/Inflammation
Storage:
- Powder: -20°C 3 years, 4°C 2 years
- In solvent: -80°C 2 years, -20°C 1 year

SOLVENT & SOLUBILITY

In Vitro
DMSO: 5.4 mg/mL (11.34 mM; Need ultrasonic and warming)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.0993 mL</td>
<td>10.4965 mL</td>
<td>20.9930 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4199 mL</td>
<td>2.0993 mL</td>
<td>4.1986 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2099 mL</td>
<td>1.0496 mL</td>
<td>2.0993 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
CXCR2-IN-1 is a central nervous system penetrant CXCR2 antagonist with a pIC₅₀ of 9.3.

IC₅₀ & Target
CXCR2
9.3 (pIC₅₀)

In Vitro
CXCR2 plays an important role in the activation and recruitment of neutrophils to sites of inflammation. CXCR2-IN-1 (compound 22) shows favorable central nervous system penetration property (Br/Bl>0.45)[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
CXCR2-IN-1 shows efficacy in a cuprizone-induced demyelination model through oral administration, providing evidence to support CXCR2 to be a potential therapeutic target to treat demyelinating diseases such as multiple sclerosis[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
**PROTOCOL**

**Animal Administration** [1]

Mice: Mice are fed with cuprizone for 5 weeks to cause demyelinating lesions in the CNS and then orally administrated with CXCR2-IN-1 for 9 consecutive days at doses of 30 and 100 mg/kg twice daily[1].

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

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**CUSTOMER VALIDATION**

- Int Immunopharmacol. 2019 Nov;76:105877

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**REFERENCES**