Fedovapagon

Cat. No.: HY-14887

CAS No.: 347887-36-9

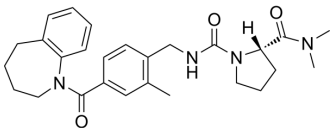
Molecular Formula: $C_{27}H_{34}N_4O_3$

Molecular Weight: 462.58

Target: Vasopressin Receptor

Pathway: GPCR/G Protein

Storage: 4°C, stored under nitrogen
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 125 mg/mL (270.22 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.1618 mL	10.8089 mL	21.6179 mL
5 mM	0.4324 mL	2.1618 mL	4.3236 mL
10 mM	0.2162 mL	1.0809 mL	2.1618 mL

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: ≥ 2.08 mg/mL (4.50 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.50 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fedovapagon (VA106483) is a selective and orally active vasopressin V2 receptor (V2R) agonist with an EC_{50} of 24 nM. Fedovapagon can be used in the research of nocturia[1].

IC_{50} & Target

V2 Receptor	V2 Receptor 24 nM (EC50)

In Vivo

Fedovapagon (1 mg/kg, oral administration) inhibits urine output with 81% inhibition rate in rats[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Brattleboro rats[1]
Dosage:	1 mg/kg, 3 mg/kg
Administration:	Oral administration
Result:	Reduced urine volume with almost full inhibition of urine output for 2 h. Returned the urine to normal levels 5 h after dosing.

REFERENCES

[1]. Yea CM, et al. New benzylureas as a novel series of potent, nonpeptidic vasopressin V2 receptor agonists. J Med Chem. 2008 Dec 25;51(24):8124-34.

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