Proteins

Product Data Sheet

CVN424

Cat. No.: HY-134661A CAS No.: 2254706-21-1 Molecular Formula: $C_{24}H_{29}F_{2}N_{5}O_{3}$ Molecular Weight: 473.52 GPR6 Target:

Pathway: GPCR/G Protein

Storage: Powder -20°C 3 years

In solvent

2 years -80°C 6 months

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 62.5 mg/mL (131.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1118 mL	10.5592 mL	21.1184 mL
	5 mM	0.4224 mL	2.1118 mL	4.2237 mL
	10 mM	0.2112 mL	1.0559 mL	2.1118 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 (4.39 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.39 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.39 mM); Clear solution

BIOLOGICAL ACTIVITY

Description CVN424 is an orally active and selective GPR6 inverse agonist with a K_i of 9.4 nM and an EC₅₀ of 38 nM. CVN424 is brainpenetrant and has the potential for Parkinson disease research^{[1][2]}.

Ki: 9.4 nM (GPR6)[1] IC₅₀ & Target EC50: 38 nM (GPR6)[1]

CVN424 (Compound 6i) has 265 fold and 68 fold selectivities over GPR3 and GPR12^[1].

In Vitro

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

REFERENCES

[1]. Huikai Sun, et al. First-Time Disclosure of CVN424, a Potent and Selective GPR6 Inverse Agonist for the Treatment of Parkinson's Disease: Discovery, Pharmacological Validation, and Identification of a Clinical Candidate. J Med Chem. 2021 Apr 16.

[2]. Nicola L Brice, et al. Development of CVN424: A Selective and Novel GPR6 Inverse Agonist Effective in Models of Parkinson Disease. J Pharmacol Exp Ther. 2021 Jun;377(3):407-416.

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

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