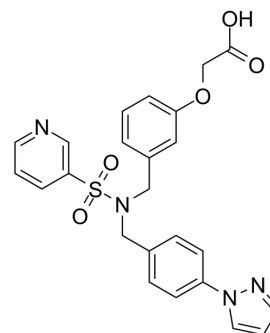


Taprenepag

| | | | |
|---------------------------|---|-------|---------|
| Cat. No.: | HY-14899 | | |
| CAS No.: | 752187-80-7 | | |
| Molecular Formula: | C ₂₄ H ₂₂ N ₄ O ₅ S | | |
| Molecular Weight: | 478.52 | | |
| Target: | Prostaglandin Receptor | | |
| Pathway: | GPCR/G Protein | | |
| 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 : ≥ 100 mg/mL (208.98 mM)
 * "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 2.0898 mL | 10.4489 mL | 20.8978 mL |
| | 5 mM | 0.4180 mL | 2.0898 mL | 4.1796 mL |
| | 10 mM | 0.2090 mL | 1.0449 mL | 2.0898 mL |

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (5.22 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Taprenepag (CP-544326) is a potent and selective prostaglandin EP₂ agonist with IC₅₀s of 10 and 15 nM for human and rat EP₂, respectively. Taprenepag shows selectivity for EP₂ over other EP receptors (IC₅₀s > 3200 nM for EP₁, EP₃, and EP₄) and a panel of 37 G protein-coupled receptors^[1].

In Vitro

Taprenepag (CP-544326) (0.01-1000 nM) increases cAMP levels in HEK293 cells expressing human EP₂ (EC₅₀=2.8 nM). Taprenepag has poor corneal permeability in an ex vivo rabbit corneal model^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Sci Adv. 2021 Apr 2;7(14):eabf1268.
- iScience. 2023 Sep 4.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Prasanna G, et al. Effect of PF-04217329 a prodrug of a selective prostaglandin EP(2) agonist on intraocular pressure inpreclinical models of glaucoma. Exp Eye Res. 2011 Sep;93(3):256-64.

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

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