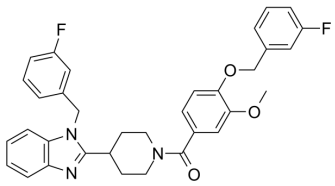
AZ194

Cat. No.:	HY-145169
CAS No.:	2241651-99-8
Molecular Formula:	$C_{34}H_{31}F_2N_3O_3$
Molecular Weight:	567.63
Target:	Sodium Channel
Pathway:	Membrane Transporter/Ion Channel
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 : 33.33 mg/mL (58.72 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7617 mL	8.8086 mL	17.6171 mL
	5 mM	0.3523 mL	1.7617 mL	3.5234 mL
	10 mM	0.1762 mL	0.8809 mL	1.7617 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: ≥ 2.5 mg/mL (4.40 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.40 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AZ194 is a first-in-class, orally active inhibitor of CRMP2-Ubc9 interaction and inhibitor of NaV1.7 (IC_{50}=1.2 μM). AZ194 blocks SUMOylation of CRMP2 to selectively reduce the amount of surface-expressed NaV1.7. Antinociceptive effects[1].

In Vivo

AZ194 would provide pain relief in rat models of chemotherapy- and nerve injury- induced neuropathic pain. AZ194 (orally; at 2 and 10 mg/kg) restores mechanical sensitivity in animals with chemotherapy-induced and nerve injury-induced neuropathic nociception[1].

AZ194 (10 mg/kg; ip; CD1 male mice) does not affect motor performance (open field). AZ194 synergizes with commonly used painkillers, engages NaV1.7-dependent endogenous opioid signaling[1].

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

REFERENCES

[1]. Cai S, et al. Selective targeting of NaV1.7 via inhibition of the CRMP2-Ubc9 interaction reduces pain in rodents. Sci Transl Med. 2021;13(619):eabh1314.

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