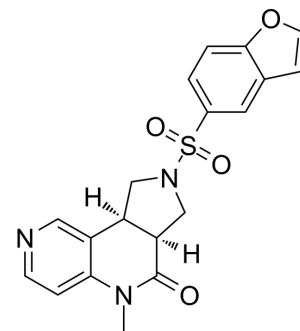


AM-1488

Cat. No.:	HY-147367
CAS No.:	2079895-60-4
Molecular Formula:	C ₁₉ H ₁₇ N ₃ O ₄ S
Molecular Weight:	383.42
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	AM-1488 is a potent, orally active glycine receptor (GlyR) potentiator (hGlyRα3 EC ₅₀ =0.45 μM) ^{[1][2]} .
In Vitro	AM-1488 also potentiates native GlyRs in mouse spinal-cord neurons, which express mostly GlyRα1(β) and GlyRα3(β) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
	Cell Viability Assay ^[1]
	Cell Line: Mouse spinal-cord neuron
	Concentration: 0.5 μM
	Incubation Time: 10 min
Result:	Increased the peak current evoked by a puff of 20 μM glycine in five out of five cells, from an average of 50.8 pA to an average of 222.2 pA.
In Vivo	AM-1488 (oral gavage; 20 mg/kg; once) treatment significantly reverse mechanical allodynia induced by nerve injury in a mouse model of neuropathic pain, without being confounded by sedation or motor side effects ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
	Animal Model: Mouse model of spared nerve injury (SNI) ^[1]
	Dosage: 20 mg/kg
	Administration: Oral gavage; 20 mg/kg; once
	Result:
Animal Model: Naive mice ^[1]	
Dosage: 20 mg/kg	

Administration:	Oral gavage; 20 mg/kg; once
Result:	Showed not significantly different from mice treated with vehicle.

REFERENCES

- [1]. Xin Huang, et al. Crystal structures of human glycine receptor $\alpha 3$ bound to a novel class of analgesic potentiators. *Nat Struct Mol Biol.* 2017 Feb;24(2):108-113.
- [2]. Howard Bregman, et al. The Discovery and Hit-to-Lead Optimization of Tricyclic Sulfonamides as Potent and Efficacious Potentiators of Glycine Receptors. *J Med Chem.* 2017 Feb 9;60(3):1105-1125.
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Caution: Product has not been fully validated for medical applications. For research use only.

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