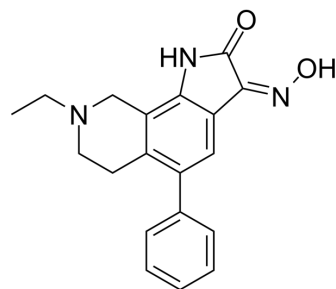


NS383

Cat. No.:	HY-131879		
CAS No.:	309711-59-9		
Molecular Formula:	C ₁₉ H ₁₉ N ₃ O ₂		
Molecular Weight:	321.37		
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 : 100 mg/mL (311.17 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
			Concentration			Concentration			Concentration		
1 mM			3.1117 mL			15.5584 mL			31.1168 mL		
5 mM			0.6223 mL			3.1117 mL			6.2234 mL		
10 mM			0.3112 mL			1.5558 mL			3.1117 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 (7.78 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.5 mg/mL (7.78 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: 2.5 mg/mL (7.78 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

NS383 is a potent and uniquely selective inhibitor of rat ASICs containing 1a and/or 3 subunits. NS383 inhibits H(+)-activated currents recorded from rat homomeric ASIC1a, ASIC3, and heteromeric ASIC1a+3 with IC₅₀ values ranging from 0.61 to 2.2 μM. NS383 is well tolerated and capable of reversing pathological painlike behaviors, presumably via peripheral actions, but possibly also via actions within central pain circuits^[1].

REFERENCES

[1]. Munro G, et al. NS383 Selectively Inhibits Acid-Sensing Ion Channels Containing 1a and 3 Subunits to Reverse Inflammatory and Neuropathic Hyperalgesia in Rats. CNS Neurosci Ther. 2016;22(2):135-145.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA