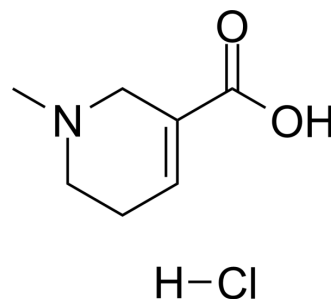


Arecaidine hydrochloride

Cat. No.:	HY-N2368A		
CAS No.:	6018-28-6		
Molecular Formula:	C ₇ H ₁₂ ClNO ₂		
Molecular Weight:	177.63		
Target:	GABA Receptor		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 100 mg/mL (562.97 mM; Need ultrasonic)
 DMSO : 25 mg/mL (140.74 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.6297 mL	28.1484 mL	56.2968 mL
	5 mM	1.1259 mL	5.6297 mL	11.2594 mL
	10 mM	0.5630 mL	2.8148 mL	5.6297 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 (14.07 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (14.07 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (14.07 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Arecaidine hydrochloride, a pyridine alkaloid, is a potent GABA uptake inhibitor. Arecaidine hydrochloride is a substrate of H⁺-coupled amino acid transporter 1 (PAT1, SLC36A1) and competitively inhibits L-proline uptake^{[1][2]}.

CUSTOMER VALIDATION

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- Int J Mol Sci. 2023 Mar 28.

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REFERENCES

- [1]. D Lodge, et al. Effects of the Areca nut constituents arecaidine and guvacine on the action of GABA in the cat central nervous system. Brain Res. 1977 Nov 18;136(3):513-22.
- [2]. Valerie Voigt, et al. Transport of the areca nut alkaloid arecaidine by the human proton-coupled amino acid transporter 1 (hPAT1). J Pharm Pharmacol. 2013 Apr;65(4):582-90.
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Caution: Product has not been fully validated for medical applications. For research use only.

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