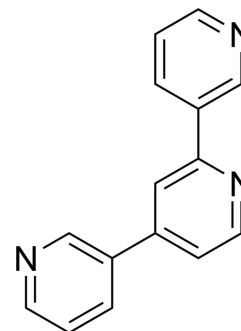


Nicotelline

Cat. No.:	HY-135560		
CAS No.:	494-04-2		
Molecular Formula:	C ₁₅ H ₁₁ N ₃		
Molecular Weight:	233.27		
Target:	Cytochrome P450		
Pathway:	Metabolic Enzyme/Protease		
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 (428.69 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.2869 mL	21.4344 mL	42.8688 mL
		5 mM	0.8574 mL	4.2869 mL	8.5738 mL
10 mM		0.4287 mL	2.1434 mL	4.2869 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.72 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.72 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Nicotelline (Nicotellin) is a nicotine-related alkaloid, as well as a weak inhibitor of human cDNA-expressed cytochrome P-450 2A6 (CYP2A6). CYP2A6 mediates coumarin 7-hydroxylation, while Nicotelline fails to exhibit inhibition at 300 μM. Nicotelline can be used as a tracer and biomarker of particulate matter (PM) derived from tobacco smoke ^{[1][2]} .
IC₅₀ & Target	CYP26 ≥300 μM (Ki)

REFERENCES

[1]. Denton TT, et al. Nicotine-related alkaloids and metabolites as inhibitors of human cytochrome P-450 2A6. *Biochem Pharmacol.* 2004 Feb 15;67(4):751-6.

[2]. Jacob P 3rd, et al. Nicotelline: a proposed biomarker and environmental tracer for particulate matter derived from tobacco smoke. *Chem Res Toxicol.* 2013 Nov 18;26(11):1615-31.

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