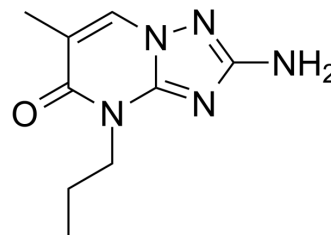


ICI-63197

Cat. No.:	HY-103024
CAS No.:	27277-00-5
Molecular Formula:	C ₉ H ₁₃ N ₅ O
Molecular Weight:	207.23
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	ICI-63197 is a phosphodiesterase 3 (PDE3) and PDE4 inhibitor with K _i values of 9 μM and 10 μM, respectively. ICI-63197 is selective against PDE1 and PDE2. ICI-63197 has antidepressant effects ^{[1][2]} .			
IC₅₀ & Target	PDE3/PDE 4 9 μM (K _i)	PDE 3 10 μM (K _i)	PDE 4 487 μM (K _i)	PDE 1 >1000 μM (K _i)
In Vitro	<p>In rabbit isolated pulmonary artery previously incubated with [³H]-noradrenaline, ICI-63197 (30 μM) significantly enhances the stimulation-induced outflow of radioactivity^[3].</p> <p>At a stimulation frequency of 2 Hz in mouse atria, ICI-63197 (30 μM) shows no effect on the stimulation-induced outflow^[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>			
In Vivo	<p>Thirty and ninety minutes after intraperitoneal administration, ICI 63197, 0.48-29.9 μmol/kg, dose-dependently antagonized the Reserpine induced hypothermia in mice^[2].</p> <p>ICI-63197 potentiates the locomotor stimulatory effect of dopamine or of the ergot dopamine agonist Lisuride administered directly into the nucleus accumbens of rats. ICI-63197 has property of enhancing central noradrenergic transmission^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>			

REFERENCES

- [1]. M Hoey, et al. Identification and selective inhibition of four distinct soluble forms of cyclic nucleotide phosphodiesterase activity from kidney. *Biochem Pharmacol.* 1990 Jul 15;40(2):193-202.
- [2]. H Wachtel. Potential antidepressant activity of rolipram and other selective cyclic adenosine 3',5'-monophosphate phosphodiesterase inhibitors. *Neuropharmacology.* 1983 Mar;22(3):267-72.
- [3]. H Johnston, et al. Prejunctional beta-adrenoceptors in rabbit pulmonary artery and mouse atria: effect of alpha-adrenoceptor blockade and phosphodiesterase inhibition. *Br J Pharmacol.* 1986 Mar;87(3):553-62.

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

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