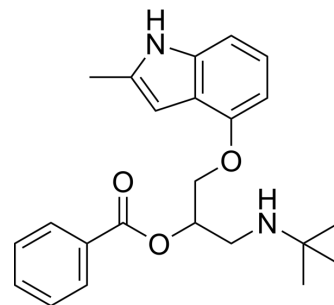


Bopindolol

Cat. No.:	HY-B1562
CAS No.:	62658-63-3
Molecular Formula:	C ₂₃ H ₂₈ N ₂ O ₃
Molecular Weight:	380.48
Target:	Adrenergic Receptor; Renin; 5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Bopindolol ((±)-Bopindolol) is an orally active antagonist of β-adrenoceptors (ARs) with partial agonist activity. Bopindolol is non-selective for β1- and β2-ARs and has low affinity for β3-AR subtype. Bopindolol has intrinsic sympathomimetic as well as membrane stabilizing actions, inhibits renin secretion, and interacts with 5-HT receptors. Bopindolol is a proagent of Pindolol (HY-B0982). Bopindolol can be used for essential and renovascular hypertension research.										
IC₅₀ & Target	β2 adrenoceptor	Beta-1 adrenergic receptor	Beta-3 adrenergic receptor								
In Vivo	<p>Bopindolol (intravenous injection; 8, 16 and 32 μg/kg) causes a dose-dependent inhibition of isoprenaline-induced tachycardia, and this agent is 4 times more potent than propranolol in anaesthetised dogs^[1].</p> <p>Bopindolol (0.3, 1 and 3 mg/kg; IP; single dosage) produces dose dependent decreases in diastolic blood pressure and in heart rate^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Male Wistar rats (260-300 g)^[2]</td> </tr> <tr> <td>Dosage:</td> <td>0.3, 1 and 3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP; single dosage</td> </tr> <tr> <td>Result:</td> <td>Produced dose dependent decreases in diastolic blood pressure, and the decrease of about 8 mmHg at 3 mg/kg. Decreased the heart rate in a dose-dependent manner.</td> </tr> </table>			Animal Model:	Male Wistar rats (260-300 g) ^[2]	Dosage:	0.3, 1 and 3 mg/kg	Administration:	IP; single dosage	Result:	Produced dose dependent decreases in diastolic blood pressure, and the decrease of about 8 mmHg at 3 mg/kg. Decreased the heart rate in a dose-dependent manner.
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REFERENCES

- [1]. Nagatomo T, et al. Bopindolol: pharmacological basis and clinical implications. *Cardiovasc Drug Rev.* 2001 Spring;19(1):9-24.
- [2]. Harron DW, et al. Bopindolol. A review of its pharmacodynamic and pharmacokinetic properties and therapeutic efficacy. *Drugs.* 1991 Jan;41(1):130-49.
- [3]. H Tanaka, et al. Hypotensive effect of bopindolol in pithed rats. *Gen Pharmacol.* 1993 Mar;24(2):373-5.
- [4]. Y Hosohata, et al. Bopindolol is a slowly dissociating beta 1-adrenoceptor antagonist when compared to other beta-blockers. *Biol Pharm Bull.* 1995 Aug;18(8):1066-71.

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

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