MCE MedChemExpress

Product Data Sheet

Bopindolol fumarate

Cat. No.: HY-B1562C CAS No.: 79125-22-7 Molecular Formula: $C_{27}H_{32}N_2O_7$

Molecular Weight: 496.55

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 ((\pm)-Bopindolol) fumarate is an orally active antagonist of β -adrenoceptors (ARs) with partial agonist activity. Bopindolol fumarate is non-selective for β 1- and β 2-ARs and has low affinity for β 3-AR subtype. Bopindolol fumarate has intrinsic sympathomimetic as well as membrane stabilizing actions, inhibits renin secretion, and interacts with 5-HT receptors. Bopindolol fumarate is a proagent of Pindolol (HY-B0982). Bopindolol fumarate can be used for essential and renovascular hypertension research.

	receptors. Bopindolol fumarate is a proagent of Pindolol (HY-B0982). Bopindolol fumarate can be used for essential and renovascular hypertension research.				
IC ₅₀ & Target	β1 adrenoceptor	β2 adrenoceptor	β3 adrenoceptor		
In Vivo	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] . Bopindolol (0.3, 1 and 3 mg/kg; IP; single dosage) produces dose dependent decreases in diastolic blood pressure and in heart rate ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.				
	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.			

REFERENCES

- [1]. Nagatomo T, et al. Bopindolol: pharmacological basis and clinical implications. Cardiovasc Drug Rev. 2001 Spring;19(1):9-24.
- [2]. D W Harron, et al. Bopindolol. A review of its pharmacodynamic and pharmacokinetic properties and therapeutic efficacy. Drugs
- [3]. H Tanaka, et al. Hypotensive effect of bopindolol in pithed rats. Gen Pharmacol. 1993 Mar;24(2):373-5.

1]. Y Hosohata, et al. Bopindo	lol is a slowly dissociating beta	1-adrenoceptor antagonist wh	nen compared to other beta-blockers. Biol F	Pharm Bull. 1995 Aug;18(8):1066-71.
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