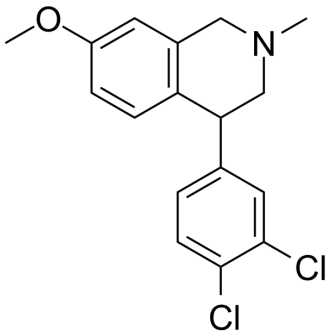
Diclofensine

Cat. No.:	HY-18610A
CAS No.:	67165-56-4
Molecular Formula:	$C_{17}H_{17}Cl_2NO$
Molecular Weight:	322.23
Target:	Dopamine Transporter
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Diclofensine(Ro-8-4650) is a potent inhibitor of monoamine reuptake, blocking the uptake of dopamine, noradrenaline, and serotonin by rat brain synaptosomes with IC50 values of 0.74, 2.3, and 3.7 nM, respectively.IC50 value:Target: Dopamine reuptake inhibitorThe action of diclofensine on peripheral neuronal adrenergic function was studied through tests of the blood pressure response to NE, tyramine, and phenylephrine (PE). The blood pressure response to NE was enhanced and that to tyramine was decreased by diclofensine, as a result of its inhibitive action on peripheral neuronal amine uptake [2]. Diclofensine, in concentrations of 0.01, 0.1 and 1 microM caused a marked decrease of 3H-DA uptake. In addition, it was unable to stimulate basal endogenous DA release which, on the contrary, was elicited by d-amphetamine in the same concentration (50 microM). On the other hand, diclofensine (50 microM) caused a 3 fold enhancement of K+-evoked DA release [3].

REFERENCES

[1]. Hyttel J, et al. Neurochemical profile of Lu 19-005, a potent inhibitor of uptake of dopamine, noradrenaline, and serotonin. J Neurochem. 1985 May;44(5):1615-22.

[2]. Gasic S, et al. Effect of diclofensine, a novel antidepressant, on peripheral adrenergic function. Clin Pharmacol Ther. 1986 May;39(5):582-5.

[3]. Di Renzo G, et al. Pure uptake blockers of dopamine can reduce prolactin secretion: studies with diclofensine. Life Sci. 1988;42(21):2161-9.

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