Clocapramine hydrochloride hydrate

Cat. No.: HY-B2073A

CAS No.: 60789-62-0

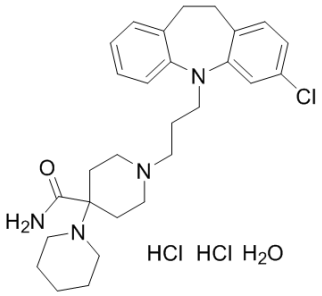
Molecular Formula: $C_{28}H_{41}Cl_3N_4O_2$

Molecular Weight: 572.01

Target: 5-HT Receptor; Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Clocapramine hydrochloride hydrate is an antagonist of the **D_2** and **5-HT_{2A} receptors**.	
IC_{50} & Target	D_2 Receptor	5-HT_{2A} Receptor
In Vivo	Clocapramine shows the lowest potency for D_2-occupancy in vivo[1]. An in vivo receptor binding technique is used to evaluate the binding profiles of typical and atypical antipsychotic drugs to striatal dopamine-D_2 and frontal serotonin-5-HT_2 receptors in a rat brain using more specific ligands. Clocapramine produces ratios of potency in occupying 5-HT_2 versus D_2 receptors that fall between these two groups (ED_{50} of 14.5 mg/kg for D_2, 4.9 mg/kg for 5-HT_2)[2].	

PROTOCOL

Animal Administration [2]

Rats[2]

Male **Wistar rats** (210 to 240 g) are housed in a temperature-controlled room with a 12-hour dark/light cycle (lights on at 8:30) and have free access to food and water. For competition studies, rats are pretreated with an intraperitoneal injection of varying doses of antipsychotic drugs or the same volume (0.21 to 0.24 mL) of the corresponding vehicle (DMSO), 10 minutes prior to the injection of [^{3}H]-YM-09151-2 or [^{3}H]-ketanserin[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Schotte A, et al. In vitro receptor binding and in vivo receptor occupancy in rat and guinea pig brain: risperidone compared with antipsychotics hitherto used. Jpn J Pharmacol. 1995 Dec;69(4):399-412.

[2]. Sumiyoshi T, et al. Atypicality of several antipsychotics on the basis of in vivo dopamine-D2 and serotonin-5HT2 receptor occupancy. Neuropsychopharmacology. 1995 Feb;12(1):57-64.

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