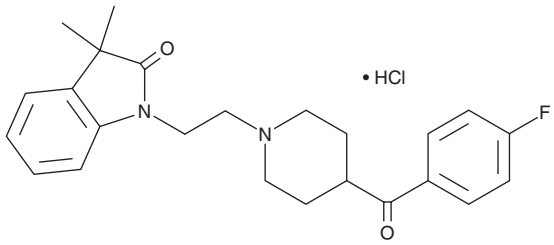
PRODUCT INFORMATION

LY310762

Item No. 22938

CAS Registry No.:	192927-92-7
Formal Name:	1-[2-[4-(4-fluorobenzoyl)-1-piperidinyl] ethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-one, monohydrochloride
MF:	$C_{24}H_{27}FN_2O_2 \bullet HCl$
FW:	430.9
Purity:	≥98%
UV/Vis.:	λ_{max}: 249, 273 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LY310762 is supplied as a crystalline solid. A stock solution may be made by dissolving the LY310762 in the solvent of choice, which should be purged with an inert gas. LY310762 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LY310762 in these solvents is approximately 0.5, 5, and 3 mg/ml, respectively.

LY310762 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LY310762 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. LY310762 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

LY310762 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT_{1D} (K_i = 249 nM for guinea pig receptors).[1] It is selective for 5-HT_{1D} over the 5-HT_{1B} receptor, where it inhibits binding of radiolabeled citalopram by only 32% when used at a concentration of 1,000 nM. LY310762 potentiates 5-HT (Item No. 14332) release stimulated by potassium in guinea pig cortex (EC_{50} = 31 nM). It also reverses vasodilation induced by 5-HT in rat kidney perfused by phenylephrine (Item Nos. 17205 | 18619) when administered at a dose of 1 mg/kg.[2]

References

1. Pullar, I.A., Boot, J.R., Broadmore, R.J., *et al.* The role of the 5-HT_{1D} receptor as a presynaptic autoreceptor in the guinea pig. *Eur. J. Pharmacol.* **493(1-3)**, 85-93 (2004).
2. García-Pedraza, J.Á., García, M., Martín, M.L., *et al.* Pharmacological evidence that 5-HT_{1D} activation induces renal vasodilation by NO pathway in rats. *Clin. Exp. Pharmacol. Physiol.* **42(6)**, 640-647 (2015).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM