PRODUCT INFORMATION



LY310762

Item No. 22938

| CAS Registry No.: | 192927-92-7 | | |
|--|--|----------------|-------|
| Formal Name: | 1-[2-[4-(4-fluorobenzoyl)-1-piperidiny | J] / | |
| | ethyl]-1,3-dihydro-3,3-dimethyl-2H- | \searrow 0 | |
| | indol-2-one, monohydrochloride | | • HCI |
| MF: | $C_{24}H_{27}FN_2O_2 \bullet HCI$ | | |
| FW: | 430.9 | | |
| Purity: | ≥98% | $\setminus - $ | Ĩ |
| UV/Vis.: | λ _{max} : 249, 273 nm | | |
| Supplied as: | A crystalline solid | | ~ Ŭ ~ |
| Storage: | -20°C | | 0 |
| 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 (EC₅₀ = 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).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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