# PRODUCT INFORMATION



# LY272015

Item No. 31471

CAS Registry No.: 172895-15-7

Formal Name: 1-[(3,4-dimethoxyphenyl)methyl]-2,3,4,9-

tetrahydro-6-methyl-1H-pyrido[3,4-b]indole,

monohydrochloride

MF: C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub> • HCl

372.9 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years • HCI

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

## **Laboratory Procedures**

LY272015 is supplied as a solid. A stock solution may be made by dissolving the LY272015 in the solvent of choice, which should be purged with an inert gas. LY272015 is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

## Description

LY272015 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT $_{2B}$ . It binds to 5-HT $_{2B}$  receptors in isolated rat fundus ( $K_b = 0.177$  nM). LY272015 is selective for 5-HT<sub>2B</sub> receptors over 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> receptors ( $K_i$ s = 3.54 and 2.1 nM, respectively), as well as  $\alpha_1$ -adrenergic receptors. <sup>1,2</sup> It reduces 5-HT-induced migration of isolated mouse aortic smooth muscle cells when used at a concentration of 100 nM.3 LY272015 (1 and 3 mg/kg) decreases mean arterial pressure in DOCA-salt hypertensive rats.<sup>4</sup>

#### References

- 1. Audia, J.E., Evrard, D.A., Murdoch, G.R., et al. Potent, selective tetrahydro-β-carboline antagonists of the serotonin 2B (5HT<sub>2B</sub>) contractile receptor in the rat stomach fundus. J. Med. Chem. 39(14), 2773-2780 (1996).
- 2. Cohen, M.L., Schenck, K.W., Mabry, T.E., et al. LY272015, a potent selective and orally active 5-HT<sub>2B</sub> receptor antagonist. J. Med Chem. 39(14), 2773-2780 (1996).
- 3. Liu, Y., Wang, Z., Li, J., et al. Inhibition of 5-hydroxytryptamine receptor 2B reduced vascular restenosis and mitigated the β-arrestin2-mammalian target of rapamycin/p70S6K pathway. J. Am. Heart Assoc. 7(3), e006810 (2017).
- 4. Watts, S.W. and Fink, G.D. 5-HT28-receptor antagonist LY-272015 is antihypertensive in DOCA-salthypertensive rats. Am. J. Physiol. 276(3), H944-H952 (1999).

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

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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