# PRODUCT INFORMATION



LY393558

Item No. 32775

CAS Registry No.: 271780-64-4

Formal Name: 1-[2-[4-(6-fluoro-1H-indol-3-

yl)-3,6-dihydro-1(2H)-pyridinyl] ethyl]-3,4-dihydro-3-(1-methylethyl)-

6-(methylsulfonyl)-1H-2,1,3benzothiadiazine, 2,2-dioxide

MF:  $C_{26}H_{31}FN_4O_4S_2$ 

FW: 546.7 **Purity:** ≥98% Supplied as: A 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**

LY393558 is supplied as a solid. A stock solution may be made by dissolving the LY393558 in the solvent of choice, which should be purged with an inert gas. LY393558 is soluble in organic solvents such as ethanol and DMSO. The solubility of LY393558 in these solvents is approximately 10 mg/ml.

### Description

LY393558 is an inhibitor of serotonin (5-HT) reuptake ( $IC_{50} = 3.3 \text{ nM}$  in rat cortical synaptosomes).<sup>1</sup> It is selective for serotonin reuptake over norepinephrine reuptake in rat cortical synaptosomes ( $IC_{50} = 2,510 \text{ nM}$ ) but does inhibit 5-HT-induced [35S]GTPγS binding in cells expressing human 5-HT<sub>1D</sub> or 5-HT<sub>1D</sub> receptors  $(K_{r}s = 0.89 \text{ and } 10.4 \text{ nM}, \text{ respectively})$ . LY393558 (30 mg/kg per day) reduces pulmonary vascular remodeling, increases in right ventricular systolic pressure, and the development of right ventricular hypertrophy in a mouse model of pulmonary arterial hypertension induced by overexpression of the serotonin transporter and hypoxia.2

# References

- 1. Pullar, I.A., Boot, J.R., Carney, S.L., et al. In vitro activity of LY393558, an inhibitor of the 5-hydroxytryptamine transporter with 5-HT<sub>1B/1D/2</sub> receptor antagonist properties. Eur. J. Pharmacol. 432(1), 9-17 (2001).
- 2. Morecroft, I., Pang, L., Baranowska, M., et al. In vivo effects of a combined 5-HT<sub>1B</sub> receptor/SERT antagonist in experimental pulmonary hypertension. Cardiovasc. Res. 85(3), 593-603 (2010).

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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# **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