

Product Data Sheet

LY393558

Cat. No.: HY-103089 CAS No.: 271780-64-4 Molecular Formula: $C_{26}H_{31}FN_4O_4S_2$

Molecular Weight: 546.68

Target: 5-HT Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description LY393558 is a potent and orally active inhibitor of the 5-HT transporter and an antagonist of 5-HT1B and 5-HT1D receptors.

LY393558 increase the extracellular levels of 5-HT in mice model frontal cortex. LY393558 can be used for researching

 $depression ^{[1]}. \\$

In Vivo LY393558 (1-20 mg/kg; p.o., single) raises extracellular levels of 5-HT to 200-250% at 1 mg/kg in guinea pigs model, while levels of 5-HT to approximately 1500% at the highest dose 20 mg/kg^[1].

LY393558 (20 mg/kg; p.o., single) completely abolishes the reduction of levels of 5-HT induced by tetrodotoxin (1 μ M) in guinea pigs model^[1].

 $LY393558 \ (1-20 \ mg/kg; p.o., single) \ significantly increases \ extracellular \ levels \ of \ 5-HT \ in \ rats \ model \ [1].$

 $LY393558 \ (5 \ mg/kg/day; p.o., 21 \ days) \ can still \ elicit \ a \ further \ increase \ in \ extracellular \ 5-HT \ in \ chronic \ treatment \ [1].$

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

Animal Model:	Female Dunkin Hartley guinea pigs (350-400 g) ^[1]
Dosage:	1-20 mg/kg
Administration:	p.o., single
Result:	Extracellular levels of 5-HT reached 200-250% at 1 mg/kg, while levels of 5-HT reached approximately 1500% at the highest dose 20 mg/kg.
Animal Model:	Female Dunkin Hartley guinea pigs (350-400 g) ^[1]
Dosage:	20 mg/kg
Administration:	p.o., single
Result:	Completely abolished the reduction of levels of 5-HT induced by tetrodotoxin (1 μ M).
Animal Model:	Male Lister Hooded rats (290-320 g) $^{[1]}$
Dosage:	1-20 mg/kg

Administration:	p.o., single
Result:	Significantly increased extracellular levels of 5-HT.
Animal Model:	Male Lister Hooded rats (290-320 g) $^{[1]}$
Dosage:	5 mg/kg/day
Administration:	p.o., 21 days
Result:	Still elicited a further increase in extracellular 5-HT in chronic treatment.

REFERENCES

[1]. Mitchell SN, et al. LY393558, a 5-hydroxytryptamine reuptake inhibitor and 5-HT(1B/1D) receptor antagonist: effects on extracellular levels of 5-hydroxytryptamine in the guinea pig and rat. Eur J Pharmacol. 2001;432(1):19-27.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech@MedChemExpress.com$

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA