

FT-LRZ83B

interchim®

INTERFINE CHEMICALS ANALYTICAL SCIENCES BIOCHROMATOGRAPHY LIFE SCIENCES

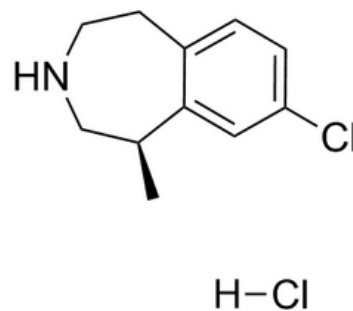
+33 4 70 03 73 06 interbiotech@interchim.com

Lorcaserin Hydrochloride

Selective full agonist of human 5-HT_{2C} receptor with K_i of 15 nM.

Product Description

Catalog #: LRZ830, 5 mg LRZ83B, 50 mg
Name : Lorcaserin Hydrochloride
 APD-356; APD356; APD 356
MW : 232.15
Formula : C₁₁H₁₅Cl₂N
CAS : 846589-98-8
Solubility : 10 mM in DMSO
IC₅₀ value : 15 nM (K_i, Human 5-HT_{2c}); 29 nM (K_i, Rat 5-HT_{2c})



Storage : -20°C

For Research Use Only

Technical and Scientific Information

in vitro: lorcaserin, a selective, high affinity 5-HT_{2C} full agonist. Lorcaserin bound to human and rat 5-HT_{2C} receptors with high affinity (K_i) = 15 +/- 1 nM, 29 +/- 7 nM, respectively), and it was a full agonist for the human 5-HT_{2C} receptor in a functional inositol phosphate accumulation assay, with 18- and 104-fold selectivity over 5-HT_{2A} and 5-HT_{2B} receptors, respectively. Lorcaserin was also highly selective for human 5-HT_{2C} over other human 5-HT receptors (5-HT_{1A}, 5-HT₃, 5-HT_{4C}, 5-HT_{5A}, 5-HT₆, and 5-HT₇), in addition to a panel of 67 other G protein-coupled receptors and ion channels. Lorcaserin did not compete for binding of ligands to serotonin, dopamine, and norepinephrine transporters, and it did not alter their function in vitro [1].

in vivo: Lorcaserin is potent in inhibiting rat acute food intake upon oral administration with ED₅₀ of 18 mg/kg at 6 hr. Lorcaserin chronic administration to rats maintained on a high fat diet also produces dose-dependent reductions in food intake and body weight gain during the 4-week study. Lorcaserin (18 mg/kg) significantly increases resting and penile grooming, and has no effects on wet dog shakes, and back muscle contractions of rats [1]. Short-term lorcaserin doses (0.3125-20 mg/kg) were administered in a counterbalanced order. Significant reduction of nicotine self-administration was achieved with all of the short-term doses in this range. Tests of lorcaserin on locomotor activity detected prominent sedative effects at doses greater than 1.25 mg/kg with more modest transient effects seen at 0.625 to 1.25 mg/kg. Long term effects of lorcaserin on locomotor activity were tested with repeated injections with 0.625 mg/kg lorcaserin 10 times over 2 weeks [2].



FT-LRZ83B

| Volume(DMSO) / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|-------------------------------------|-----------|------------|------------|
| 1 mM | 4.3076 mL | 21.5378 mL | 43.0756 mL |
| 5 mM | 0.8615 mL | 4.3076 mL | 8.6151 mL |
| 10 mM | 0.4308 mL | 2.1538 mL | 4.3076 mL |

[1]. Thomsen WJ, *et al.* Lorcaserin, a novel selective human 5-hydroxytryptamine_{2C} agonist: in vitro and in vivo pharmacological characterization. *J Pharmacol Exp Ther.* 325(2):577-87 (2008)

[2]. Levin ED, *et al.* Lorcaserin, a 5-HT_{2C} agonist, decreases nicotine self-administration in female rats. *J Pharmacol Exp Ther.* 338(3):890-6 (2011)

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.
Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information
Hotline : +33(0)4 70 03 73 06 – Interbiotech@interchim.com

Disclaimer : Materials are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. Interchim® is not liable for any damage resulting from handling or contact with this product.