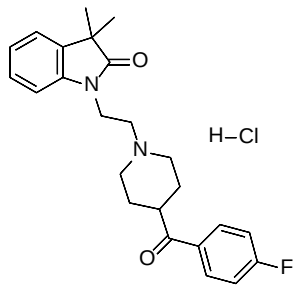
Product data sheet

MedKoo Cat#: 522354 Name: LY310762 HCl CAS: 192927-92-7 Chemical Formula: $C_{24}H_{28}ClFN_2O_2$ Exact Mass: 430.1823 Molecular Weight: 430.9484	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
LY310762 is a 5-HT1D antagonist with Ki of 249 nM, having a weaker affinity for 5-HT1B receptor.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	3.0	6.96
DMSO	16.71	38.76
DMSO:PBS (pH 7.2) (1:6)	0.14	0.32
Ethanol	0.5	1.16
Water	4.31	10.0

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.32 mL	11.60 mL	23.21 mL
5 mM	0.46 mL	2.32 mL	4.64 mL
10 mM	0.23 mL	1.16 mL	2.32 mL
50 mM	0.05 mL	0.23 mL	0.46 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

TBD

In vivo study

1. García-Pedraza JÁ, García M, Martín ML, Morán A. Pharmacological evidence that 5-HT1D activation induces renal vasodilation by NO pathway in rats. Clin Exp Pharmacol Physiol. 2015 Jun;42(6):640-7. doi: 10.1111/1440-1681.12397. PMID: 25854421.
2. Choi IS, Cho JH, An CH, Jung JK, Hur YK, Choi JK, Jang IS. 5-HT(1B) receptors inhibit glutamate release from primary afferent terminals in rat medullary dorsal horn neurons. Br J Pharmacol. 2012 Sep;167(2):356-67. doi: 10.1111/j.1476-5381.2012.01964.x. PMID: 22462474; PMCID: PMC3481043.

7. Bioactivity
Biological target:

LY310762 is a selective 5-HT1D receptor antagonist (K_i=249 nM) with a weak affinity for 5-HT1B receptor.

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In vitro activity

TBD

In vivo activity

This study aimed to investigate whether, behind the predominant serotonergic vasoconstrictor action, THE 5-HT system may exert renal vasodilator actions, and, if so, characterize the 5-HT receptors and possible indirect pathways. Renal perfusion pressure (PP), systemic blood pressure (SBP) and heart rate (HR) measurement in in situ autoperfused rat kidney was determined in phenylephrine infused rats. These vasodilator responses were potentiated by 5-HT_2 antagonism (ritanserin, 1 mg/kg i.v.), whereas the responses were abolished by 5-$HT_{1/7}$ antagonist (methiothepin, 100 μg/kg i.v.) or 5-HT1D antagonist (LY310762, 1 mg/kg i.v.).

Reference: Clin Exp Pharmacol Physiol. 2015 Jun;42(6):640-7. https://pubmed.ncbi.nlm.nih.gov/25854421/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.