# Data Sheet (Cat.No.T22936)

TargetMol

## Idalopirdine Hydrochloride

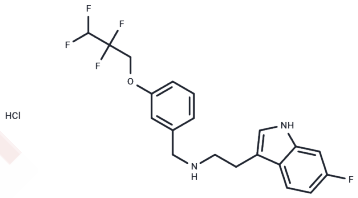
### Chemical Properties

CAS No. : 467458-02-2

Formula: C20H20ClF5N2O

Molecular Weight: 434.83

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.




### Biological Description

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|---|---|
| Description | Idalopirdine Hydrochloride (Lu AE58054 Hydrochloride) is an in-vivo binding affinity and effect, in-vitro selectivity and potency of 5-HT(6)R antagonist (Ki: 0.83 nM). |
| Targets(IC50) | 5-HT Receptor |
| In vitro | In the 5-HT(6) GTP gamma S efficacy assay, Lu AE58054 showed potent inhibition of 5-HT-mediated activation. Apart from medium affinity to adrenergic alpha (1B)- and alpha(1A)-adrenoreceptors, Lu AE58054 shows >50-fold selectivity compared with more than 70 targets examined[1]. |
| In vivo | In the rats model, Orally administered Lu AE58054 inhibited binding of the 5-HT6 antagonist Lu AE60157 (ED50: 2.7 mg/kg). Administration of Lu AE58054 in a dose range (5-20 mg/kg) leading to above 65% 5-HT6R binding, which reversed cognitive impairment in rats treatment with phencyclidine. These results indicate that Lu AE58054 is a potent antagonist of 5-HT6Rs with good oral bioavailability in the rat model of cognitive impairment in schizophrenia[1]. |

### Solubility Information

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|---|---|
| Solubility | Ethanol: 50 mg/mL (114.99 mM),Sonication is recommended.<br>DMSO: 20 mg/mL (45.99 mM),Sonication is recommended.<br>H2O: 3 mg/mL (6.9 mM),Sonication and heating are recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (4.6 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.2997 mL | 11.4987 mL | 22.9975 mL |
| 5 mM | 0.4599 mL | 2.2997 mL | 4.5995 mL |
| 10 mM | 0.230 mL | 1.1499 mL | 2.2997 mL |
| 50 mM | 0.046 mL | 0.230 mL | 0.4599 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Arnt J, Bang-Andersen B, Grayson B, et al. Lu AE58054, a 5-HT6 antagonist, reverses cognitive impairment induced by subchronic phencyclidine in a novel object recognition test in rats. Int J Neuropsychopharmacol, 2010, 13(8): 1021-1033.

Louise Witten, Benny Bang-Andersen, et al. Characterization of [3H]Lu AE60157 ([3H]8-(4-methylpiperazin-1-yl)-3-phenylsulfonylquinoline) binding to 5-hydroxytryptamine6 (5-HT6) receptors in vivo, European Journal of Pharmacology, Volume 676, Issues 1–3, 2012, Pages 6-11.