

DA-6886

Chemical Properties

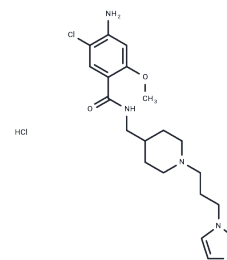
CAS No. : 1645260-76-9

Formula: C₁₉H₂₈Cl₂N₆O₂

Molecular Weight: 443.37

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

| | |
|----------------------------|---|
| Description | DA-6886 is an agonist 5-Hydroxytryptamine receptor 4 (5-HT ₄). DA-6886 induced relaxation of the rat oesophagus preparation in a 5-HT ₄ receptor antagonist-sensitive manner. The evaluation of DA-6886 in CHO cells expressing hERG channels revealed that it inhibited hERG channel current with an pIC ₅₀ value of 4.3, indicating that the compound was 1000-fold more selective for the 5-HT ₄ receptor over hERG channels. |
| Targets(IC ₅₀) | 5-HT Receptor |
| In vivo | In the normal ICR mice, DA-6886 (0.4 and 2mg/kg; oral) resulted in a marked stimulation of colonic transit. In the loperamide-induced constipation mouse model, DA-6886 (2mg/kg) significantly improved the delay of colonic transit. Taken together, DA-6886 is a highly potent and selective 5-HT ₄ receptor agonist to accelerate colonic transit in mice, which might be a therapeutic agent having a favorable safety profile in the treatment of gastrointestinal motor disorders such as IBS-C and chronic constipation.[1] |

Solubility Information

| | |
|------------|--|
| Solubility | DMSO: 45 mg/mL (101.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|--|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|------------|------------|-------------|
| 1 mM | 2.2555 mL | 11.2773 mL | 22.5545 mL |
| 5 mM | 0.4511 mL | 2.2555 mL | 4.5109 mL |
| 10 mM | 0.2255 mL | 1.1277 mL | 2.2555 mL |
| 50 mM | 0.0451 mL | 0.2255 mL | 0.4511 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

Lee MJ, et al. Pharmacological profile of DA-6886, a novel 5-HT₄ receptor agonist to accelerate colonic motor activity in mice. *Eur J Pharmacol.* 2014;735:115-122.

Lee DY, et al. Pharmacokinetics of DA-6886, A New 5-HT₄ Receptor Agonist, in Rats. *Pharmaceutics.* 2022;14(4):70

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481