# ST-1006

**Cat. No.:** HY-120541

**CAS No.:** 1196994-11-2

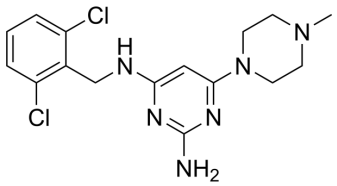
**Molecular Formula:** $C_{16}H_{20}Cl_2N_6$

**Molecular Weight:** 367.28

**Target:** Histamine Receptor

**Pathway:** GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling

**Storage:** 4°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 125 mg/mL (340.34 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.7227 mL | 13.6136 mL | 27.2272 mL |
| | 5 mM | 0.5445 mL | 2.7227 mL | 5.4454 mL |
| | 10 mM | 0.2723 mL | 1.3614 mL | 2.7227 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

**Description**

ST-1006 is a potent histamine H4 receptor agonist with a $pK_i$ value of 7.94. ST-1006 has anti-inflammatory effect[1][2].

**$IC_{50}$ & Target**

$H_4$ receptor
7.94 (pKi)

**In Vitro**

ST-1006 (10 μM) is a potent inducer of basophil migration and induces migration of basophils[2].
ST-1006 (0-100 μM) suppresses FceRImediated basophil activation and reduces the CD63 and CD203c expression levels on FceRI-activated basophils[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**

ST-1006 (1-100 mg/kg; s.c.; Male CD-1 mice) has anti-inflammatory effect and displays an antipruritic effect[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|---|---|
| Animal Model: | Male CD-1 mice with pruritus (8-10 weeks and 25-30 g)[1] |
| Dosage: | 1-100 mg/kg |

| | |
|---|---|
| Administration: | Subcutaneous injection |
| Result: | Had an antipruritic effect at the non-anti-inflammatory dose of 30 mg/kg. |

## REFERENCES

[1]. Adami M, et, al. Differential effects of functionally different histamine H4 receptor ligands on acute irritant dermatitis in mice. Naunyn Schmiedebergs Arch Pharmacol. 2018 Dec;391(12):1387-1397.

[2]. Mommert S, et, al. Human basophil chemotaxis and activation are regulated via the histamine H4 receptor. Allergy. 2016 Sep;71(9):1264-73.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

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