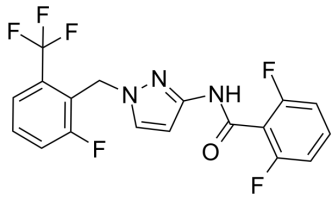
GSK-5498A

Cat. No.:	HY-12521
CAS No.:	1253186-49-0
Molecular Formula:	$C_{18}H_{11}F_6N_3O$
Molecular Weight:	399.29
Target:	CRAC Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (250.44 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.5044 mL	12.5222 mL	25.0445 mL
5 mM	0.5009 mL	2.5044 mL	5.0089 mL
10 mM	0.2504 mL	1.2522 mL	2.5044 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 3 mg/mL (7.51 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 3 mg/mL (7.51 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

GSK-5498A is a selective CARC channel inhibitor (IC_{50}: 1 μM). GSK-5498A inhibits mediators release from mast cells and pro-inflammatory cytokines release from T cells. GSK-5498A can be used in the research of inflammatory disorders[1].

IC_{50} & Target

CRAC channel[1]

In Vitro

GSK-5498A (1 and 10 μM) inhibits calcium influx through CRAC channels in human embryonic kidney cells[1].
GSK-5498A (1 nM-10 μM) inhibits the thapsigargin-evoked fluorescence signal (pIC_{50}: 6.3) in Jurkat cells, measured using the calcium sensitive dye: Fluo4-AM[1].
GSK-5498A (1 nM-10 μM) evokes concentration-dependent inhibition of Cytostim-evoked interferon-γ and IL-5 production in

PBMCs[1].
GSK-5498A (1 μM-10 μM) inhibits degranulation of rat tissue-resident mast cells[1].
GSK-5498A (10 nM-10 μM) inhibits mouse and rat T-cell cytokine (IL-2) release[1].
GSK-5498A (0-10 μM) shows high selectivity for CRAC channels over other ion channels, enzymes and G-protein coupled receptors[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Commun. 2020 Oct 30;11(1):5489.
- Adv Sci (Weinh). 2020 Aug 20;7(18):1903746.
- J Physiol. 2017 May 15;595(10):3203-3218.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Rice LV, et al. Characterization of selective Calcium-Release Activated Calcium channel blockers in mast cells and T-cells from human, rat, mouse and guinea-pig preparations. Eur J Pharmacol. 2013 Mar 15;704(1-3):49-57.

Caution: Product has not been fully validated for medical applications. For research use only.

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