CRAC Channel

Calcium release-activated channels; Ca\(^{2+}\) release-activated Ca\(^{2+}\) channels

The Ca\(^{2+}\) release-activated Ca\(^{2+}\) (CRAC) channel is a highly Ca\(^{2+}\) -selective store-operated channel expressed in T cells, mast cells, and various other tissues. CRAC channels regulate critical cellular processes such as gene expression, motility, and the secretion of inflammatory mediators. The identification of Orai1, a key subunit of the CRAC channel pore, and STIM1, the endoplasmic reticulum (ER) Ca\(^{2+}\) sensor, have provided the tools to illuminate the mechanisms of regulation and the pore properties of CRAC channels. Opening of CRAC channels enables the refilling of ER Ca\(^{2+}\) stores and sustains long-lasting Ca\(^{2+}\) oscillations and plateau signals, critical for the proliferation of T cells and production of cytokines following antigenic stimulation.
# CRAC Channel Inhibitors & Modulators

## CM-4620
Cat. No.: HY-101942

**Bioactivity:** CM-4620 is a calcium-release activated calcium-channel (CRAC) inhibitor, with IC$_{50}$ of 119, 895 nM for Orai1/STIM1 and Orai2/STIM1 channels, respectively.

- **Purity:** 99.44%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

## CRAC intermediate 1
Cat. No.: HY-20587

**Bioactivity:** CRAC intermediate 1 is a key intermediate in the chemical synthesis of a series of CRAC channel inhibitors, detailed information can be found in Patent WO 2010122089 A1, intermediate 9.

- **Purity:** >98%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg

## CRAC intermediate 2
Cat. No.: HY-20588

**Bioactivity:** CRAC intermediate 2 is a intermediate compound for CRAC inhibitor synthesis, extracted from patent WO 2013059666A1.

- **Purity:** 99.96%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

## GSK-5498A
Cat. No.: HY-12521

**Bioactivity:** GSK-5498A is a selective small molecule blocker of CRAC channel(IC50=1 uM); inhibit mediator release from mast cells, and pro-inflammatory cytokine release from T-cells in a variety of species.

- **Purity:** 97.45%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg

## Synta66
Cat. No.: HY-111325

**Bioactivity:** Synta66 is an inhibitor of store-operated calcium entry channel Orai, which forms the pore of the CRAC channel, and used for the research of neurological disease.

- **Purity:** 99.31%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

## YM-58483
(BTP2)
Cat. No.: HY-100831

**Bioactivity:** YM-58483 is the first selective and potent inhibitor of CRAC channels and subsequent Ca$^{2+}$ signals.

- **Purity:** 98.31%
- **Clinical Data:** No Development Reported
- **Size:** 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg