

ORAI1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP14588b**Specification**

ORAI1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q96D31](#)**ORAI1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 84876**Other Names**

Calcium release-activated calcium channel protein 1, Protein orai-1, Transmembrane protein 142A, ORAI1, CRACM1, TMEM142A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ORAI1 Antibody (C-term) Blocking Peptide - Protein Information**Name** ORAI1**Synonyms** CRACM1, TMEM142A**Function**

Ca(2+) release-activated Ca(2+) (CRAC) channel subunit which mediates Ca(2+) influx following depletion of intracellular Ca(2+) stores and channel activation by the Ca(2+) sensor, STIM1 (PubMed:16582901, PubMed:16645049, PubMed:16733527, PubMed:16766533, PubMed:16807233, PubMed:19249086, PubMed:23307288, PubMed:24351972, PubMed:24591628, PubMed:28219928, PubMed:20354224, PubMed:26956484).

CRAC channels are the main pathway for Ca(2+) influx in T-cells and promote the immune

response to pathogens by activating the transcription factor NFAT (PubMed:16582901). Plays a prominent role in Ca(2+) influx at the basolateral membrane of mammary epithelial cells independently of the Ca(2+) content of endoplasmic reticulum or Golgi stores. May mediate transepithelial transport of large quantities of Ca(2+) for milk secretion.

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q8BWG9}; Multi-pass membrane protein. Note=Isoform beta is more mobile in the plasma membrane (PubMed:23307288). Colocalizes with STIM1 at the cell membrane (PubMed:27185316).

Tissue Location

Expressed in naive CD4 and CD8 T cells (at protein level) (PubMed:26956484). Expressed at similar levels in naive and effector T helper cells (PubMed:20354224)

ORAI1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

ORAI1 Antibody (C-term) Blocking Peptide - Images

ORAI1 Antibody (C-term) Blocking Peptide - Background

CRACM1 is a plasma membrane protein essential for store-operated calcium entry (Vig et al., 2006 [PubMed16645049]).

ORAI1 Antibody (C-term) Blocking Peptide - References

Feng, M., et al. Cell 143(1):84-98(2010)Kawasaki, T., et al. J. Biol. Chem. 285(33):25720-25730(2010)Motiani, R.K., et al. J. Biol. Chem. 285(25):19173-19183(2010)Zhou, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 107(11):4896-4901(2010)Bogeski, I., et al. Sci Signal 3 (115), RA24 (2010) :