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ORAI1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP9371c

Specification

ORAI1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q96D31

ORAI1 Antibody (Center) 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 (Center) 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 (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

ORAI1 Antibody (Center) Blocking Peptide - Images

ORAI1 Antibody (Center) Blocking Peptide - Background

ORAI1 is a plasma membrane protein essential for store-operated calcium entry.

ORAI1 Antibody (Center) Blocking Peptide - References

Zhou,Y. Proc. Natl. Acad. Sci. U.S.A. 107 (11), 4896-4901 (2010)Calloway,N. Biochemistry 49 (6), 1067-1071 (2010)McCarl,C.A. J. Allergy Clin. Immunol. 124 (6), 1311-1318 (2009)