Datasheet for ABIN7043413

anti-ORAI1 antibody (Extracellular) (FITC)

2 Images

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Overview

Quantity:	50 µL
Target:	ORAI1
Binding Specificity:	AA 200-212, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ORAI1 antibody is conjugated to FITC
Application:	Live Cell Imaging (LCI), Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Orai1 (extracellular) conjugated to the fluorescent dye FITC.
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)KFLPLKRQAGQPS, corresponding to amino acid residues 200-212 of mouse Orai1
Isotype:	IgG
Specificity:	2nd extracellular loop
Cross-Reactivity:	Mouse, Rat
Cross-Reactivity (Details):	Will not recognize human Orai1
Predicted Reactivity:	Rat - identical Will not recognize human Orai1
Characteristics:	A Rabbit Polyclonal Antibody to Orai1 (extracellular) conjugated to the fluorescent dye FITC.

Product Details

Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	ORAI1
Alternative Name:	ORAI1 (ORAI1 Products)
Background:	TMEM142A, Calcium release-activated calcium channel protein 1, CRACM1,Cytosolic calcium (Ca2+) has long been known to act as a key second messenger in many intracellular pathways including synaptic transmission, muscle contraction, hormonal secretion, cell growth and proliferation1,2. Intracellular Ca2+ levels are controlled by either the influx of Ca2+ through the calcium-release-activated Ca2+ channels (CRAC), or from intracellular stores which gained much attention.Recently, several key players of the store operated complex have been identified3. Orai1 (also known as CRACM1) acts as the store operated Ca2+ channel (SOC) and STIM1, which acts as the endoplasmic reticulum Ca2+ sensor3,4. The formation of functional channels requires the presence of both Orai1 and STIM1 proteins working as a complex and involves the co-clustering of Orai1 on the plasma membrane with STIM1 on the endoplasmic reticulum4-6. TRPC1, a member of the transient receptor potential family was also suggested to act as a player in the SOC complex7. In T-cells, Ca2+ entry following activation by antigen-receptor engagement occurs solely through CRAC channels where Orai1 constitutes the pore forming subunit3,8.Orai1 is a plasma membrane protein with four potential transmembrane domains and intracellular N- and C-terminus. In addition, two mammalian homologs to Orai1 have been identified, Orai2 and Orai33,9. All three, Orai1 Orai2 and Orai3, are capable of forming store operated channels with different magnitudes9. Alternative names: TMEM142A, Calcium release-activated calcium channel protein 1, CRACM1
Gene ID:	109305
NCBI Accession:	NM_032790
UniProt:	Q8BWG9
Pathways:	TCR Signaling, BCR Signaling

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A

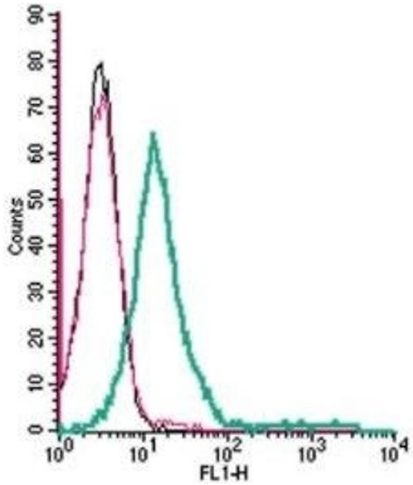
Application Details

Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7236179)
Restrictions:	For Research Use only

Handling

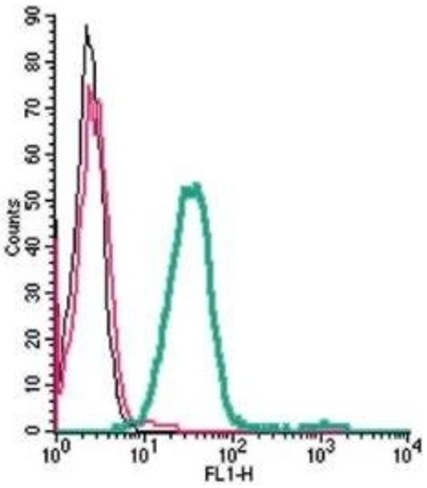
Format:	Lyophilized
Reconstitution:	50 µL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Flow Cytometry

Image 1. Cell surface detection of Orai1 by direct flow cytometry in live intact mouse TK-1 T-cell lynphoma cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Orai1 (extracellular)-FITC Antibody (ABIN7043413, ABIN7045486, ABIN7045487 and ABIN7045488), (5 µg).



Flow Cytometry

Image 2. Cell surface detection of Orai1 by direct flow cytometry in live intact rat RBL-2H3 basophilic leukemia cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Orai1 (extracellular)-FITC Antibody (ABIN7043413, ABIN7045486, ABIN7045487 and ABIN7045488), (5 µg).