

# Product datasheet

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# ARG56837 anti-ORAI1 / CRACM1 antibody

Package: 50 μg Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes ORAI1 / CRACM1

Tested Reactivity Hu
Predict Reactivity Ms

Tested Application IHC-P, WB

Specificity This antibody is predicted to have no cross-reactivity to ORAI2 or ORAI3.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ORAI1 / CRACM1

Species Human

Immunogen Synthetic peptide (16 aa) within the last 50 aa of Human ORAI1 / CRACM1.

Conjugation Un-conjugated

Alternate Names Protein orai-1; CRACM1; Transmembrane protein 142A; IMD9; ORAT1; Calcium release-activated

calcium channel protein 1; TAM2; TMEM142A

## **Application Instructions**

| Application table | Application  | Dilution      |
|-------------------|--|---------------|
|                   | IHC-P  | 2.5 μg/ml     |
|                   | WB   | 0.5 - 2 μg/ml |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |               |
| Positive Control  | Human ovary tissue lysate  |               |

#### **Properties**

**Buffer** 

Form Liquid

Purification Affinity purification with immunogen.

PBS and 0.02% Sodium azide.

Preservative 0.02% Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Database links <u>GeneID: 84876 Human</u>

Swiss-port # Q96D31 Human

Gene Symbol ORAI1

Gene Full Name ORAI calcium release-activated calcium modulator 1

Background The protein encoded by this gene is a membrane calcium channel subunit that is activated by the

calcium sensor STIM1 when calcium stores are depleted. This type of channel is the primary way for calcium influx into T-cells. Defects in this gene are a cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 1 (IDTICED1). [provided by RefSeq, Sep 2011]

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. 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. [UniProt]

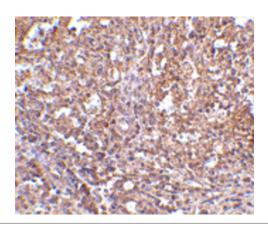
Calculated Mw 33 kDa

PTM N-glycosylated.

Ubiquitinated.

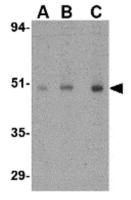
Cys-195 is oxidated, leading to inactivate channel activity.

### **Images**



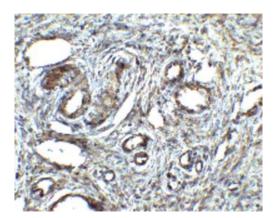
#### ARG56837 anti-ORAI1 / CRACM1 antibody IHC-P image

Immunohistochemistry: Human spleen tissue stained with ARG56837 anti-ORAI1 / CRACM1 antibody at 2.5 µg/ml dilution.



#### ARG56837 anti-ORAI1 / CRACM1 antibody WB image

Western blot: Human ovary tissue lysate stained with ARG56837 anti-ORAl1 / CRACM1 antibody at (A) 0.5, (B) 1 and (C) 2  $\mu$ g/ml dilution.



# ARG56837 anti-ORAI1 / CRACM1 antibody IHC-P image

Immunohistochemistry: Human ovary tissue stained with ARG56837 anti-ORAI1 / CRACM1 antibody at 2.5  $\mu\text{g/ml}$  dilution.