

**ORAI3 Antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI15098****Specification**

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**ORAI3 Antibody - N-terminal region - Product Information**

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|-------------------|----------------------------------------------------------------|
| Application       | WB                                                             |
| Primary Accession | <a href="#">Q9BRQ5</a>                                         |
| Other Accession   | <a href="#">NM_152288</a> , <a href="#">NP_689501</a>          |
| Reactivity        | Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog |
| Predicted         | Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog |
| Host              | Rabbit                                                         |
| Clonality         | Polyclonal                                                     |
| Calculated MW     | 31kDa kDa                                                      |

**ORAI3 Antibody - N-terminal region - Additional Information****Gene ID** 93129**Alias Symbol** **MGC13024, TMEM142C****Other Names**

Protein orai-3, Transmembrane protein 142C, ORAI3, TMEM142C

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-ORAI3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

ORAI3 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

**ORAI3 Antibody - N-terminal region - Protein Information****Name** ORAI3**Synonyms** TMEM142C**Function**

Pore-forming subunit of two major inward rectifying Ca(2+) channels at the plasma membrane: Ca(2+) release-activated Ca(2+) (CRAC) channels and arachidonate-regulated Ca(2+)-selective (ARC) channels (PubMed:&lt;a href="http://www.uniprot.org/citations/16807233" target="\_blank"&gt;16807233&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/17442569" target="\_blank"&gt;17442569&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/19182790" target="\_blank"&gt;19182790&lt;/a&gt;)

target="\_blank">19182790</a>, PubMed:<a href="http://www.uniprot.org/citations/19622606" target="\_blank">19622606</a>, PubMed:<a href="http://www.uniprot.org/citations/19706554" target="\_blank">19706554</a>, PubMed:<a href="http://www.uniprot.org/citations/20354224" target="\_blank">20354224</a>, PubMed:<a href="http://www.uniprot.org/citations/32415068" target="\_blank">32415068</a>). Assembles with ORAI1 and ORAI2 to form hexameric CRAC channels that mediate  $\text{Ca}^{2+}$  influx upon depletion of endoplasmic reticulum  $\text{Ca}^{2+}$  store and channel activation by  $\text{Ca}^{2+}$  sensor STIM1, a process known as store-operated  $\text{Ca}^{2+}$  entry (SOCE). Various pore subunit combinations may account for distinct CRAC channel spatiotemporal and cell-type specific dynamics. ORAI1 mainly contributes to the generation of  $\text{Ca}^{2+}$  plateaus involved in sustained  $\text{Ca}^{2+}$  entry and is dispensable for cytosolic  $\text{Ca}^{2+}$  oscillations, whereas ORAI2 and ORAI3 generate oscillatory patterns. CRAC channels assemble in  $\text{Ca}^{2+}$  signaling microdomains where  $\text{Ca}^{2+}$  influx is coupled to calmodulin and calcineurin signaling and activation of NFAT transcription factors recruited to ORAI1 via AKAP5. CRAC channels are the main pathway for  $\text{Ca}^{2+}$  influx in T cells and promote the immune response to pathogens by activating NFAT-dependent cytokine and chemokine transcription (PubMed:<a href="http://www.uniprot.org/citations/16807233" target="\_blank">16807233</a>, PubMed:<a href="http://www.uniprot.org/citations/17442569" target="\_blank">17442569</a>, PubMed:<a href="http://www.uniprot.org/citations/19182790" target="\_blank">19182790</a>, PubMed:<a href="http://www.uniprot.org/citations/19706554" target="\_blank">19706554</a>, PubMed:<a href="http://www.uniprot.org/citations/20354224" target="\_blank">20354224</a>, PubMed:<a href="http://www.uniprot.org/citations/32415068" target="\_blank">32415068</a>). Assembles with ORAI1 to form channels that mediate store-independent  $\text{Ca}^{2+}$  influx in response to inflammatory metabolites arachidonate or its derivative leukotriene C<sub>4</sub>, termed ARC and LRC channels respectively (PubMed:<a href="http://www.uniprot.org/citations/19622606" target="\_blank">19622606</a>, PubMed:<a href="http://www.uniprot.org/citations/32415068" target="\_blank">32415068</a>).

#### Cellular Location

Cell membrane; Multi-pass membrane protein. Note=Colocalizes with STIM1 upon store depletion.

#### Tissue Location

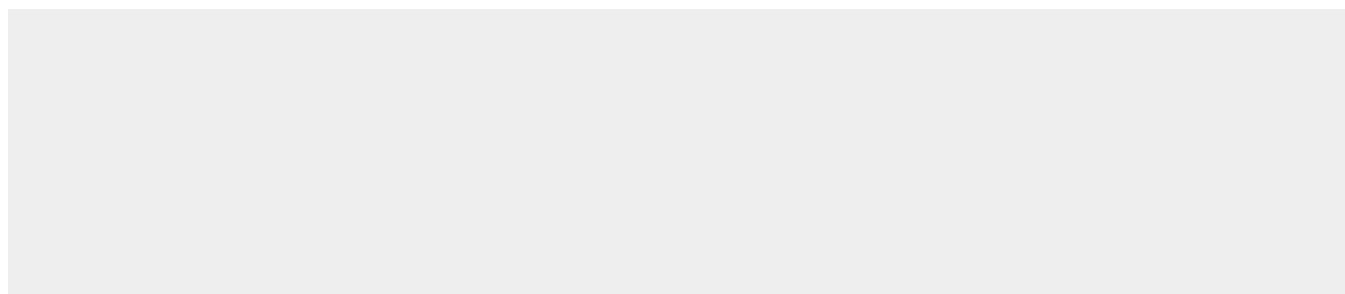
Expressed in both naive and effector T helper cells with higher levels in effector cells.

#### ORAI3 Antibody - N-terminal region - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ORAI3 Antibody - N-terminal region - Images





90 kDa\_\_  
65 kDa\_\_  
40 kDa\_\_  
29 kDa\_\_  
22 kDa\_\_

WB Suggested Anti-ORAI3 Antibody Titration: 1.0 µg/ml  
Positive Control: Placenta

### **ORAI3 Antibody - N-terminal region - References**

Feske S.,et al.Nature 441:179-185(2006).  
Srikanth S.,et al.Nat. Cell Biol. 12:436-446(2010).