

ORAI3 Rabbit mAb
Catalog # AP76635**Specification**

ORAI3 Rabbit mAb - Product Information

Application	WB, IHC-P
Primary Accession	Q9BRQ5
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	31499

ORAI3 Rabbit mAb - Additional Information**Gene ID** 93129**Other Names**
ORAI3**Dilution**
WB~~1/500-1/1000
IHC-P~~N/A**Format**
50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.**Storage**
Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.**ORAI3 Rabbit mAb - 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:16807233, PubMed:17442569, PubMed:19182790, PubMed:19622606, PubMed:19706554, PubMed:20354224, PubMed:32415068). Assembles with ORAI1 and ORAI2 to form hexameric CRAC channels that mediate Ca(2+) influx upon depletion of endoplasmic reticulum Ca(2+) store and channel activation by Ca(2+) sensor STIM1, a process known as store-operated 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:16807233, PubMed:17442569, PubMed:19182790, PubMed:19706554, PubMed:20354224, PubMed:32415068). Assembles with ORAI1 to form channels that mediate store-independent $\text{Ca}(2+)$ influx in response to inflammatory metabolites arachidonate or its derivative leukotriene C4, termed ARC and LRC channels respectively (PubMed:19622606, PubMed:32415068).

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 Rabbit mAb - 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 Rabbit mAb - Images



