

**ORAI2 Antibody**  
**Catalog # ASC10528****Specification**

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**ORAI2 Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">Q96SN7</a>
Other Accession	<a href="#">Q96SN7</a> , <a href="#">74732728</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 19, 28 kDa

Application Notes	Observed: 29 kDa KDa ORAI2 antibody can be used for detection of ORAI2 by Western blot at 1 - 4 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
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**ORAI2 Antibody - Additional Information**

Gene ID **80228**

**Other Names**

ORAI2 Antibody: CBCIP2, C7orf19, MEM142B, TMEM142B, CBCIP2, PP1729, Protein orai-2, CAP-binding protein complex-interacting protein 2, ORAI calcium release-activated calcium modulator 2

**Target/Specificity**

ORAI2; At least two isoforms of ORAI2 are known to exist; this antibody will detect both isoforms. ORAI antibody is predicted not to cross-react with ORAI1 or ORAI3.

**Reconstitution & Storage**

ORAI2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

ORAI2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ORAI2 Antibody - Protein Information**

**Name** ORAI2

**Synonyms** C7orf19, CBCIP2, TMEM142B

**Function**

Ca(2+) release-activated Ca(2+)-like (CRAC-like) channel subunit which mediates Ca(2+) influx and increase in Ca(2+)-selective current by synergy with the Ca(2+) sensor, STIM1.

#### Cellular Location

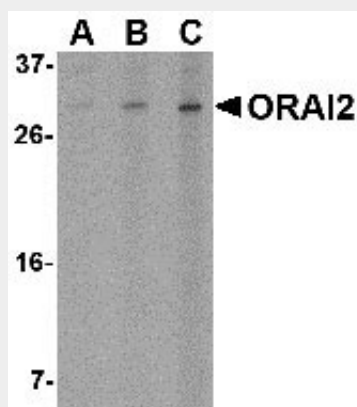
Membrane; Multi-pass membrane protein

#### ORAI2 Antibody - Protocols

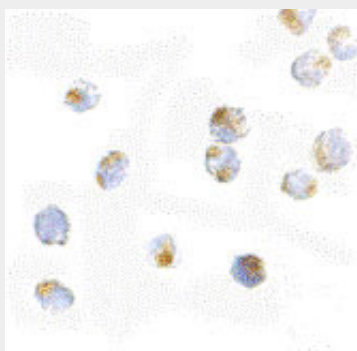
Provided below are standard protocols that you may find useful for product applications.

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

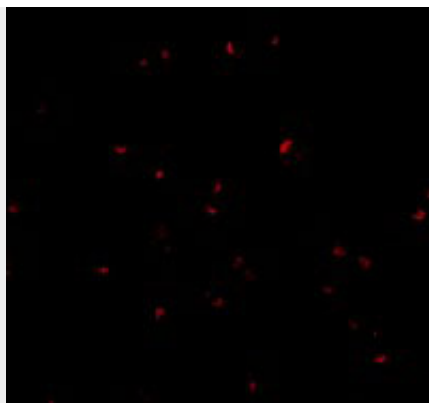
#### ORAI2 Antibody - Images



Western blot analysis of ORAI2 in Jurkat cell lysate with ORAI2 antibody at (A) 1, (B) 2 and (C) 4 µg/mL.



Immunocytochemistry of ORAI2 in Jurkat cells with ORAI2 antibody at 5 µg/mL.



Immunofluorescence of ORAI2 in Jurkat cells with ORAI2 antibody at 20 µg/mL.

### **ORAI2 Antibody - Background**

ORAI2 Antibody: Antigen stimulation of immune cells triggers  $\text{Ca}^{++}$  entry through  $\text{Ca}^{++}$  release-activated  $\text{Ca}^{++}$  (CRAC) channels. ORAI2 is one of two mammalian homologs to ORAI1, a recently identified four-transmembrane spanning protein that is an essential component of CRAC. Like ORAI1, ORAI2 has been shown to function as a highly selective  $\text{Ca}^{++}$  plasma membrane channel that is gated through interactions with STIM1, the store-activated endoplasmic reticulum  $\text{Ca}^{++}$  sensor, although at a lesser efficacy than ORAI1.

### **ORAI2 Antibody - References**

Lewis RS. Calcium signaling mechanisms in T lymphocytes. *Annu. Rev. Immunol.* 2001; 19:497-521.  
Feske S, Gwack Y, Prakriya M, et al. A mutation in Orai1 causes immune deficiency by abrogating CRAC channel function. *Nature* 2006; 441:179-85.  
Soboloff J, Spassova MA, Dziadek MA, et al. Calcium signals mediated by STIM and Orai proteins - a new paradigm in inter-organelle communication. *Biochim. Biophys. Acta.* 2006; 1763:1161-8.  
Mercer JC, DeHaven WI, Smyth JT, et al. Large store-operated calcium selective currents due to co-expression of Orai1 or Orai2 with the intracellular calcium sensor, Stim1. *J. Biol. Chem.* 2006; 281:24979-90.