

ORAI2 Antibody

Catalog # ASC10528

Specification

ORAI2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, ICC, IF <u>O96SN7</u> <u>O96SN7</u>, <u>74732728</u> Human, Mouse Rabbit Polyclonal IgG Predicted: 19, 28 kDa

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.

ORAI2 Antibody - Additional Information

Gene ID 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.

80228

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.

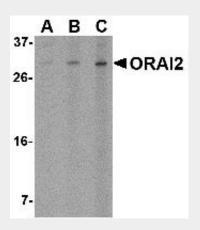
Cellular Location Membrane; Multi-pass membrane protein

ORAI2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ORAI2 Antibody - Images

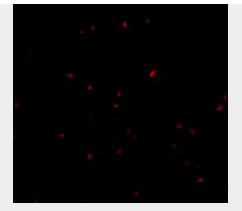


Western blot analysis of ORAI2 in Jurkat cell lysate with ORAI2 antibody at (A) 1, (B) 2 and (C) 4 μ g/mL.



Immunocytochemistry of ORAI2 in Jurkat cells with ORAI2 antibody at 5 μ g/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 Ca++ entry through Ca++ release-activated 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 Ca++ plasma membrane channel that is gated through interactions with STIM1, the store-activated endoplasmic reticulum 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.