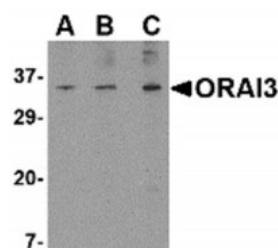


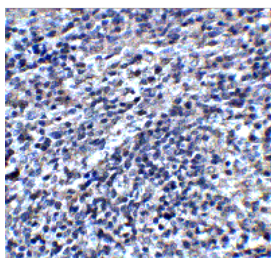


ORAI3 Antibody

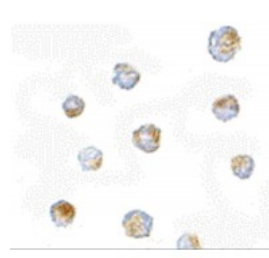
CATALOG NUMBER: 4117



Western blot analysis of ORAI3 in A20 cell lysate with ORAI3 antibody at (A) 1, (B) 2 and (C) 4 ug/mL.



Immunohistochemistry of ORAI3 in mouse spleen tissue with ORAI3 antibody at 2 ug/mL.



Immunocytochemistry of ORAI3 in A20 cells with ORAI3 antibody at 10 ug/mL.

Specifications

SPECIES REACTIVITY:

TESTED APPLICATIONS:

APPLICATIONS: ORAI3 antibody can be used for detection of ORAI3 by Western blot at 1 - 4 ug/mL. Antibody can also be used for immunocytochemistry starting at 10 ug/mL and Immunohistochemistry starting at 2 ug/mL.

USER NOTE: Optimal dilutions for each application to be determined by the researcher.

POSITIVE CONTROL: 1) Cat. No. 1288 - A-20 Cell Lysate

SPECIFICITY: This antibody is predicted to have no cross-reactivity to ORAI1 or ORAI2.

IMMUNOGEN: ORAI3 antibody was raised against a 15 amino acid synthetic peptide from near the amino terminus of human ORAI3.

The immunogen is located within the first 50 amino acids of ORAI3.

HOST SPECIES: Rabbit

Properties

PURIFICATION: ORAI3 Antibody is affinity chromatography purified via peptide column.

PHYSICAL STATE: Liquid

BUFFER: ORAI3 Antibody is supplied in PBS containing 0.02% sodium azide.

CONCENTRATION: 1 mg/mL

STORAGE CONDITIONS: ORAI3 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.

CLONALITY: Polyclonal

ISOTYPE: IgG

CONJUGATE: Unconjugated

Additional Info

ALTERNATE NAMES: ORAI3 Antibody: TMEM142C, TMEM142C, Protein orai-3, Transmembrane protein 142C

ACCESSION NO.:	Q9BRQ5
PROTEIN GI NO.:	74732916
OFFICIAL SYMBOL:	ORAI3
GENE ID:	93129

Background

BACKGROUND: ORAI3 Antibody: Antigen stimulation of immune cells triggers Ca^{++} entry through Ca^{++} release-activated Ca^{++} (CRAC) channels. ORAI3 is one of two mammalian homologs to ORAI1, a recently identified four-transmembrane spanning protein that is an essential component of CRAC. All three homologs have been shown to function as Ca^{++} plasma membrane channels gated through interactions with STIM1, the store-activated endoplasmic reticulum Ca^{++} sensor. However, ORAI3 channels failed to produce detectable Ca^{++} selective currents in cells co-transfected with ORAI3 and STIM1, indicating that ORAI3 channels undergo a lesser degree of depotentiation than ORAI1 or ORAI2. Na^{+} currents through ORAI1, 2 and 3 channels were equally inhibited by extracellular Ca^{++} , indicating that each have similar affinities for Ca^{++} within the selectivity filter.

- REFERENCES:**
- 1) Lewis RS. Calcium signaling mechanisms in T lymphocytes. Annu. Rev. Immunol. 2001; 19:497-521.
 - 2) 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.
 - 3) 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.
 - 4) 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.

FOR RESEARCH USE ONLY

December 12, 2016