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Datasheet for 600-401-H08

ORAI3 Antibody

Overview

Description:	Anti-ORAI3 (RABBIT) Antibody - 600-401-H08
Item No.:	600-401-H08
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	ORAI3 antibody detects human ORAI3. 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. This antibody is predicted to have no cross-reactivity to ORAI1 or ORAI2. Anti-ORAI3 antibodies are ideal for investigators involved cell cycle protein and enzyme research.
Synonyms:	TMEM142C, Transmembrane protein 142C, ORAI3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ORAI3
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	ORAI3 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the n-terminus of human ORAI3.
Purity/Specificity:	Anti-ORAI3 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with ORAI3 with Human, Rat and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with ORAI3 from other sources has not been determined. No cross reaction to ORAI1 or ORAI2.
Relevant Links:	• NCBI - NP_689501.1 • UniProtKB - Q9BRQ5 • GeneID - 93129

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-ORAI3 Antibody is tested for use in E, WB, and IHC. Expect a band approximately ~34.4 kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	1-2 ug/mL

Formulation

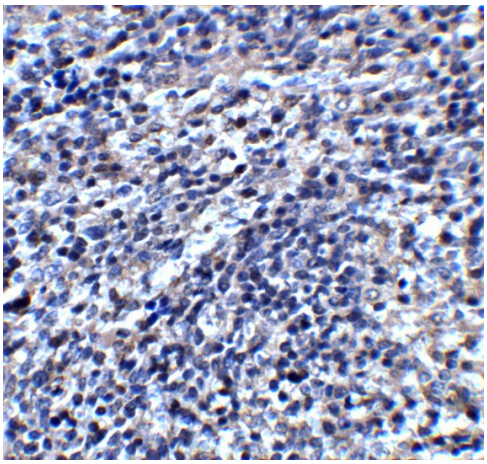
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

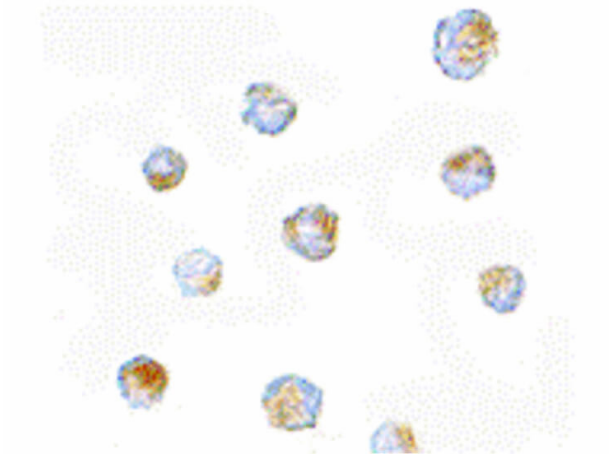
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

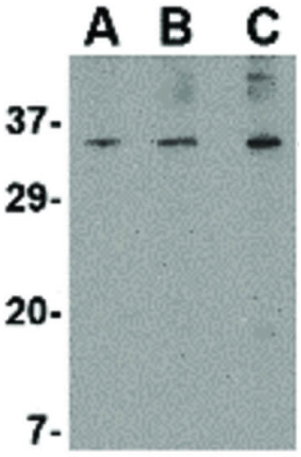
Images



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



Immunocytochemistry
Immunocytochemistry of ORAI3 antibody. Tissue: A20 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ORAI3 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ORAI3 is nuclear and occasionally cytoplasmic. Staining: ORAI3 as a precipitated brown signal with hematoxylin purple counterstain.



Western Blot

Western Blot of ORAI3 antibody. Lane A: A20 cell lysate at 1 µg/mL. Lane B: A20 cell lysate at 2 µg/mL.
Lane C: A20 cell lysate at 4 µg/mL. Load: 35 µg per lane.
Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 32.6 kDa, ~35 kDa for ORAI3.

Disclaimer

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