Datasheet for 600-401-DH2

ORAI3 Antibody

Overview

Description:	Anti-ORAI3 (RABBIT) Antibody - 600-401-DH2
Item No.:	600-401-DH2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	ORAI3 Antibody, TMEM142C, TMEM142C, Protein orai-3, Transmembrane protein 142C
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ORAI3
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ORAI3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide from near the C-terminus of human ORAI3.
Purity/Specificity:	Anti-ORAI3 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ORAI3 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9BRQ5 • GeneID - 93129 • NCBI - NP_689501.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ORAI3 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 31 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
IF:	10 µg/mL
WB:	2-4 µg/mL

Formulation

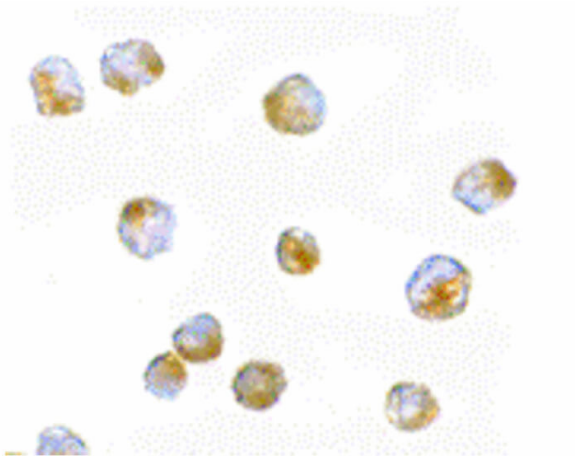
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

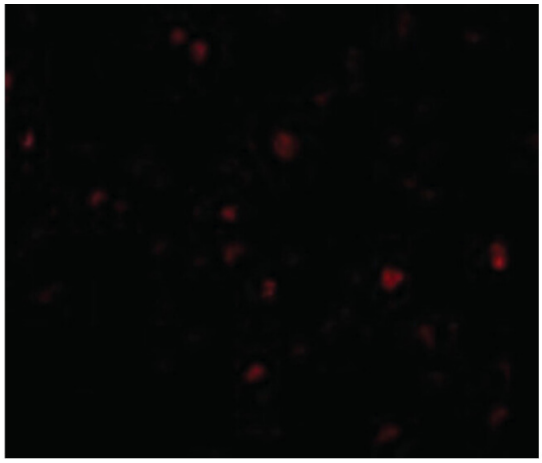
Shipping Condition:	Dry Ice

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.

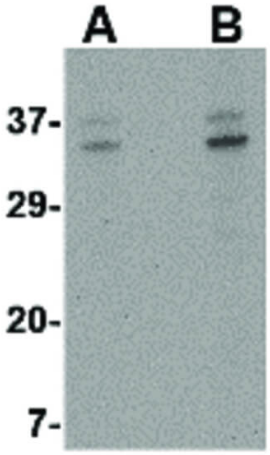
Images



Immunocytochemistry
Immunocytochemistry of ORAI3 antibody. Tissue: A20 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ORAI3 antibody at 5 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 precipitated brown signal with hematoxylin purple counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of ORAI3 antibody. Tissue: A20 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ORAI3 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: ORAI3 as a red fluorescent signal.



Western Blot

Western Blot of PRAI3 antibody. Lane A: A20 cell lysate at 2 µg/mL. Lane B: 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: 31.49 kDa, ~35 kDa for PRAI3. Other band(s): ORAI3 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.