

Datasheet for 200-301-DH0

Orai1 Antibody [3F6H5]**Overview**

Description:	Anti-Orai1 (MOUSE) Antibody - 200-301-DH0
Item No.:	200-301-DH0
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	Antigen stimulation of immune cells triggers Ca ⁺⁺ entry through Ca ⁺⁺ release-activated Ca ⁺⁺ (CRAC) channels. Orai1 is a recently identified four-transmembrane spanning protein that is an essential component of CRAC. A missense mutation in this protein in humans is the cause of one form of hereditary severe combined immune deficiency (SCID) which results in ablated T-cell Ca ⁺⁺ entry. It has been suggested that Orai1 functions as a highly selective Ca ⁺⁺ plasma membrane channel that is gated through interactions with STIM1, the store-activated endoplasmic reticulum Ca ⁺⁺ sensor. Orai1 often migrates at a higher than expected molecular weight in SDS-PAGE. This antibody is predicted to have no cross-reactivity to Orai2 or Orai3.
Synonyms:	Orai1 Antibody [3F6H5] , IMD9, ORAT1, CRACM1, TMEM142A
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	[3F6H5]
Format:	IgG1

Target Details

Gene Name:	Orai1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ORAI1 antibody was produced in mice by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human ORAI1.
Purity/Specificity:	Anti-ORAI1 Monoclonal Antibody was Protein A purified. Cross reactivity with ORAI1 [3F6H5] from other sources has not been determined.
Relevant Links:	• UniProtKB - Q96D31 • GeneID - 84876 • NCBI - NP_116179.2

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ORAI1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 33 kDa in Western Blots of specific cell lysates and tissues. Validated in human samples. All other applications and species not yet tested.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 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

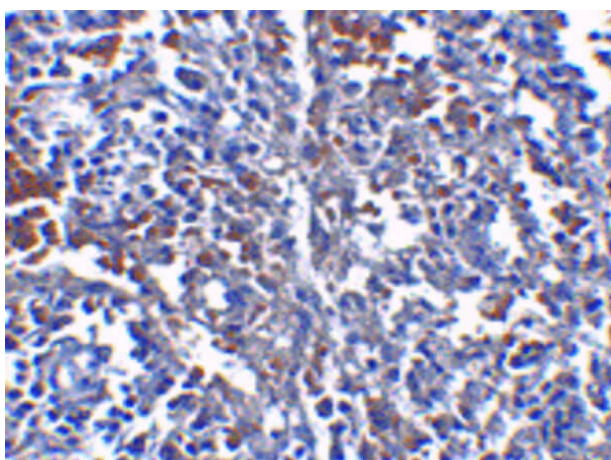
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

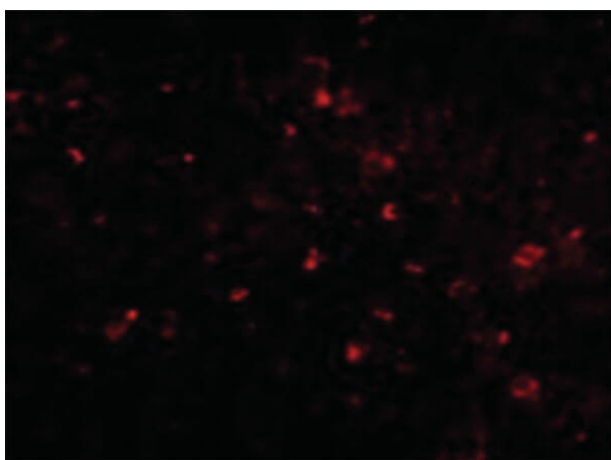
Expiration: Expiration date is one (1) year from date of receipt.

Images



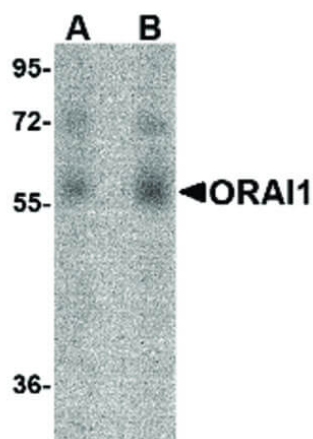
Immunohistochemistry

Immunohistochemistry of Mouse anti-ORAI1 antibody. Tissue: human spleen tissue. Primary antibody: ORAI1 antibody at 2.5 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:2,500. Localization: ORAI1 is located on the membrane.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-ORAI1 antibody. Tissue: human spleen cells. Primary antibody: ORAI1 antibody at 20 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:20,000. Localization: ORAI1 is located on the cell membrane. Staining: ORAI1 as red fluorescent signal.

**Western Blot**

Western Blot of Mouse anti-ORAI1 antibody. Lane A: human ovary tissue lysate at 1 µg/mL. Lane B: human ovary tissue lysate at 2 µg/mL. Primary antibody: ORAI1 antibody overnight at 4°C. Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 32/25 kDa, 56 kDa for ORAI1.

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.