

Datasheet for 600-401-C00**ORAI1 Antibody****Overview**

Description:	Anti-ORAI1 (RABBIT) Antibody - 600-401-C00
Item No.:	600-401-C00
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. Recently identified, ORAI1 is a 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. Anti-ORAI1 antibody is ideal for investigators involved cell cycle protein and enzyme research.
Synonyms:	ORAI1, Transmembrane protein 142A, TMEM142A, Calcium release-activated calcium channel protein 1, CRACM1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ORAI1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	ORAI1 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the n-terminus of human ORAI1.

Purity/Specificity: Anti-ORAI1 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with ORAI1 with Human and Mouse based on 100% homology with the immunizing sequence. This antibody is predicted to have no cross-reactivity to ORAI2 or ORAI3. Cross-reactivity with ORAI1 from other sources has not been determined.

Relevant Links:

- [NCBI - NP_116179.2](#)
- [UniProtKB - Q96D31](#)
- [GeneID - 84876](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: ORAI1 antibody has been tested in ELISA, WB, IF, and IHC. ORAI1 often migrates at a higher than expected (~32 kDa) molecular weight in SDS-PAGE. Expect a band at ~51 kDa in size corresponding to ORAI1 by western blotting in the appropriate cell lysate or extract. 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.

ELISA: 1:10,000 - 1:40,000

IF: 20 µg/mL

IHC: 10 µg/mL

WB: 0.5 - 1.0 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 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

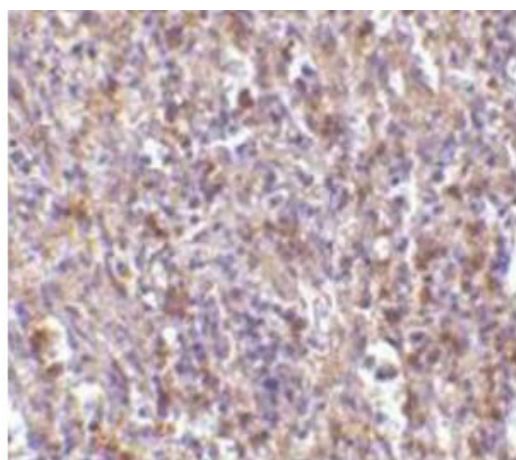
Shipping & Handling

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.

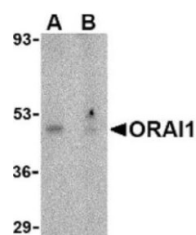
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry showing detection of ORAI in human spleen; primary antibody anti-ORAI-1 was used at 10 µg/mL.



Western Blot

Western blot of human ORAI1 Antibody. Lane A: ovary tissue lysate in the absence of blocking peptide. Lane B: ovary tissue lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary Antibody: Anti-ORAI-1 at 1µ/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.

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.