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Datasheet for 600-401-H08

# ORAI3 Antibody

## Overview

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| **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

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| **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

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| **Gene Name:** | ORAI3 |
| **Reactivity:** | Human, Mouse, Rat |

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| **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<br>• UniProtKB - Q9BRQ5<br>• GeneID - 93129 |

## Application Details

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| **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

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| **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

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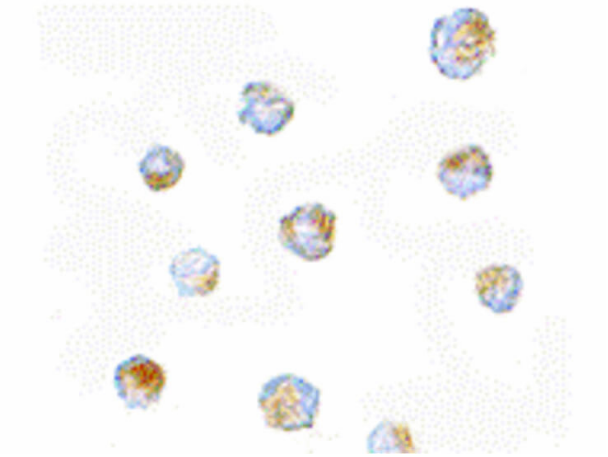
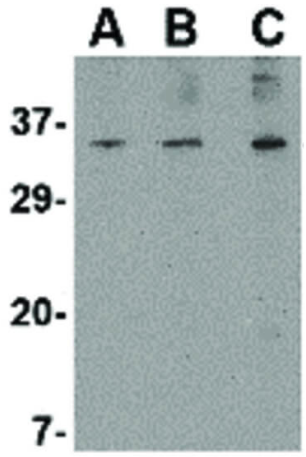
| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product 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 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