

For Research Use Only

# ORAI1 Monoclonal antibody

Catalog Number: 66223-1-Ig **23 Publications**



## Basic Information

|  |   |   |
|--|---|---|
| <b>Catalog Number:</b><br>66223-1-Ig   | <b>GenBank Accession Number:</b><br>BC015369                            | <b>Purification Method:</b><br>Protein A purification                     |
| <b>Size:</b><br>150ul , Concentration: 1900 ug/ml by Nanodrop and 1020 ug/ml by Bradford method using BSA as the standard; | <b>GeneID (NCBI):</b><br>84876  | <b>CloneNo.:</b><br>3C12F9  |
| <b>Source:</b><br>Mouse  | <b>UNIPROT ID:</b><br>Q96D31  | <b>Recommended Dilutions:</b><br>WB 1:5000-1:30000<br>IF/ICC 1:400-1:1600 |
| <b>Isotype:</b><br>IgG2a   | <b>Full Name:</b><br>ORAI calcium release-activated calcium modulator 1 |   |
| <b>Immunogen Catalog Number:</b><br>AG18050  | <b>Calculated MW:</b><br>301 aa, 33 kDa                                 |   |
|  | <b>Observed MW:</b><br>32 kDa   |   |

## Applications

|  |   |
|--|---|
| <b>Tested Applications:</b><br>WB, IF/ICC, ELISA           | <b>Positive Controls:</b><br>WB : HL-60 cells, 4T1 cells, A375 cells, RAW 264.7 cells, pig spleen tissue, rat spleen tissue, pig thymus tissue, Raji cells, Ramos cells, Daudi cells, Jurkat cells, K-562 cells |
| <b>Cited Applications:</b><br>WB, IHC, IF                  | <b>IF/ICC :</b> Jurkat cells,   |
| <b>Species Specificity:</b><br>human, mouse, rat, pig      |   |
| <b>Cited Species:</b><br>human, mouse, rat, monkey, bovine |   |

## Background Information

Store-operated calcium channels (SOCs) play essential functions in various physiological processes. Orai1 (also named CRACM1) is a critical molecular component of SOCs. Orai1 protein is a 32-55 kDa plasma membrane protein with 4 transmembrane domains. Human patients with a severe combined immunodeficiency (SCID) syndrome possess point mutations in Orai1 gene.

## Notable Publications

| Author         | Pubmed ID | Journal      | Application |
|----------------|-----------|--------------|-------------|
| Bingbing Zhang | 32981726  | J Dairy Sci  | WB          |
| Yu Chen        | 34592660  | Cell Calcium | WB          |
| Chunming Gu    | 36109490  | Oncogenesis  | WB,IF       |

## Storage

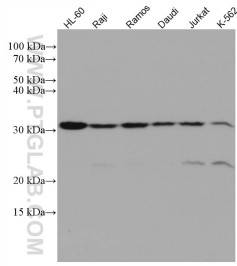
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

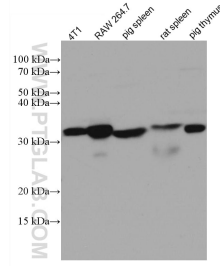
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E: proteintech@ptglab.com  
W: ptglab.com

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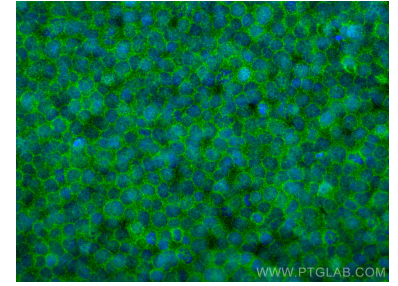
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66223-1-Ig (ORAI1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using ORAI1 antibody (66223-1-Ig, Clone: 3C12F9) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).