#### For Research Use Only

# ORAI1 Polyclonal antibody

Catalog Number: 14442-1-AP 2 Publications



**Basic Information** 

Catalog Number:

14442-1-AP

NM\_032790 GeneID (NCBI): Antigen affinity purification

150ul , Concentration: 500  $\mu g/ml$  by 84876 Recommended Dilutions:

**Purification Method:** 

WB 1:500-1:2000

Nanodrop: Source:

Rabbit

Isotype:

IgG

**UNIPROT ID:** 

Q96D31

Full Name:

ORAI calcium release-activated

GenBank Accession Number:

calcium modulator 1

Calculated MW:

35 kDa

Observed MW: 30-35 kDa, 45-55 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Cited Applications:

WB, IHC, IP

Species Specificity:

human, mouse

Cited Species: human, mouse Positive Controls:

WB: human peripheral blood platelets, mouse skeletal

muscle tissue

### **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\ {\sim}35\ kDa\ plasma\ membrane\ protein\ protein\$ with 4 transmembrane domains. ORAI1 is a complex glycosylated protein, it exists in several molecular weight forms: a theoretical molecular weight of 32.7 kDa of the unmodified protein and two major glycosylated proteins of ~43 kDa and ~50 kDa (PMID: 22318387). Human patients with a severe combined immunodeficiency (SCID) syndrome possess point mutations in Orai1 gene. This antibody may be used to block the ion currents mediated by Orai1.

#### **Notable Publications**

| Author    | Pubmed ID | Journal                    | Application |
|-----------|-----------|----------------------------|-------------|
| Yuan Wei  | 33888544  | BMJ Open Diabetes Res Care | IP          |
| Duan Zhuo | 39135143  | Stem Cell Res Ther         | WB,IHC      |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

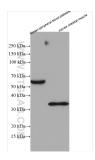
Storage Buffer:

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

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 14442-1-AP (ORAI 1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.