For Research Use Only

ORAI1 Polyclonal antibody

Catalog Number: 14442-1-AP 2 Publications



Basic Information

Catalog Number: 14442-1-AP

Size: 500 µg/ml Source: Rabbit

Isotype: IgG GenBank Accession Number:

NM_032790 GeneID (NCBI): 84876 UNIPROT ID: Q96D31 Full Name:

ORAI calcium release-activated calcium modulator 1

Calculated MW: 35 kDa Observed MW: 30-35 kDa, 45-55 kDa Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:500-1:2000

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 ~35 kDa plasma membrane 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:

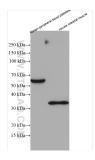
Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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.