

EFCAB4B Rabbit pAb

Catalog # AP97258

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9BSW2
Other Accession	Q9BSW2
Reactivity	Mouse
Predicted	Rat, Human, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83193
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EFCAB4B
Epitope Specificity	201-300/1503
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the EFCAB4 family. Contains 2 EF-hand domains.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	EF-CAB4B is a 395 amino acid protein belonging to the EF-CAB4 family. Localizing to cytoplasm, EF-CAB4B contains two EF-hand domains and exists as two alternatively spliced isoforms. At low Ca ²⁺ concentrations, EF-CAB4B acts as a calcium-sensor, facilitating the clustering of Orai1 and Stim1 at the junctional regions between plasma membrane and endoplasmic reticulum, leading to regulation of CRAC channel activation. The gene encoding EF-CAB4B maps to human chromosome 12p13.32. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia.

Additional Information

Gene ID	84766
Other Names	EFCAB4B; RAB46; Gm1073; Gm462; EFC4B_HUMAN; CRACR2A; Calcium release-activated calcium channel regulator 2A (CRAC channel regulator 2A); Calcium release-activated channel regulator 2A; Ras-related protein Rab-46; EFC4B_MOUSE; calcium release activated channel regulator 2A; EF-hand calcium binding domain 4B; Ca ²⁺ release-activated Ca ²⁺ (CRAC) channel regulator 2A; CRAC regulator 2A
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CRACR2A (HGNC:28657)
Function	[Isoform 1]: Ca(2+)-binding protein that plays a key role in store-operated Ca(2+) entry (SOCE) in T-cells by regulating CRAC channel activation. Acts as a cytoplasmic calcium-sensor that facilitates the clustering of ORAI1 and STIM1 at the junctional regions between the plasma membrane and the endoplasmic reticulum upon low Ca(2+) concentration. It thereby regulates CRAC channel activation, including translocation and clustering of ORAI1 and STIM1. Upon increase of cytoplasmic Ca(2+) resulting from opening of CRAC channels, dissociates from ORAI1 and STIM1, thereby destabilizing the ORAI1-STIM1 complex.
Cellular Location	[Isoform 1]: Cytoplasm
Tissue Location	[Isoform 1]: Expressed in the Jurkat T-cell line.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.