

EFCAB4B Antibody
Catalog # ASC11232**Specification**

EFCAB4B Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q9BSW2
Other Accession	NP_001138430 , 84766
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	EFCAB4B antibody can be used for detection of EFCAB4B by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

EFCAB4B Antibody - Additional InformationGene ID **84766****Target/Specificity**

EFCAB4B antibody was raised against a 14 amino acid synthetic peptide near the carboxy terminus of human EFCAB4B.

The immunogen is located within amino acids 640 - 690 of EFCAB4B.

Reconstitution & Storage

EFCAB4B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

EFCAB4B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EFCAB4B Antibody - Protein Information**Name** CRACR2A**Synonyms** EFCAB4B, RAB46 {ECO:0000303|PubMed:31092}**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

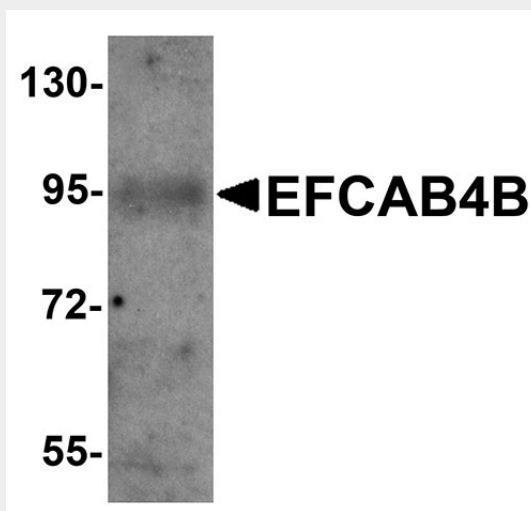
Tissue Location

[Isoform 1]: Expressed in the Jurkat T-cell line.

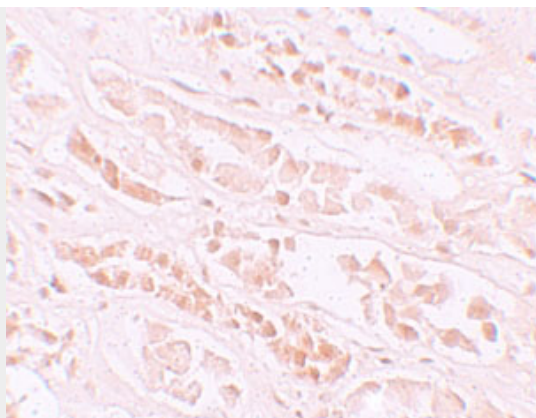
EFCAB4B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

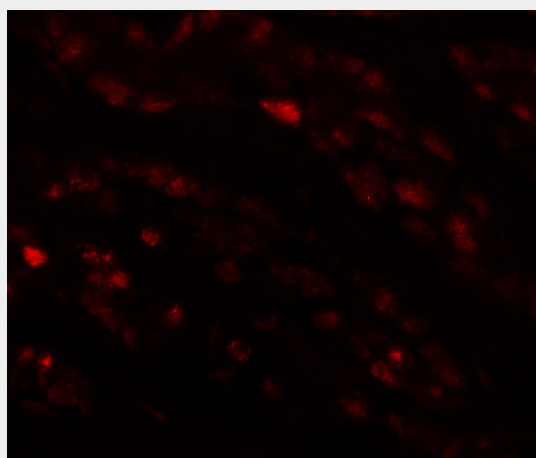
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EFCAB4B Antibody - Images

Western blot analysis of EFCAB4B in mouse kidney tissue lysate with EFCAB4B antibody at 1 μ g/mL.



Immunohistochemistry of EFCAB4B in human kidney tissue with EFCAB4B antibody at 10 µg/mL.



Immunofluorescence of EFCAB4B in human kidney tissue with EFCAB4B antibody at 20 µg/mL.

EFCAB4B Antibody - Background

EFCAB4B Antibody: EFCAB4B, also known as Calcium release-activated calcium channel regulator 2A, is a novel Ca^{2+} -binding EF-hand protein that is thought to play a key role in store-operated Ca^{2+} entry in T-cells by regulating CRAC channel activation. EFCAB4B acts as a cytoplasmic calcium-sensor that forms a complex with ORAI1 and STIM1 at the junctional regions between the plasma membrane and the endoplasmic reticulum upon low Ca^{2+} concentration. A closely related protein, EFCAB4A, is likely to play a similar role as EFCAB4B, but the detailed function of EFCAB4A is still under investigation.

EFCAB4B Antibody - References

Srikanth S, Jung HJ, Kim KD, et al. A novel EF-hand protein, CRACR2A, is a cytosolic Ca^{2+} sensor that stabilizes CRAC channels in T cells. *Nat. Cell. Biol.*2010; 12:436-46.
Srikanth S, Jung HJ, Ribalet B, et al. The intracellular loop of Orail plays a central role in fast inactivation of Ca^{2+} release-activated Ca^{2+} channels. *J. Biol. Chem.*2010; 285:5066-75.
Maruyama K, Mikawa T, and Ebashi S. Detection of calcium binding proteins by ^{45}Ca autoradiography on nitrocellulose membrane after sodium dodecyl sulfate gel electrophoresis. *J. Biochem.*1984; 95:511-9.