

**EFCAB4B Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP17969a****Specification**

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**EFCAB4B Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9BSW2</a>
Other Accession	<a href="#">NP_001138430.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83193
Antigen Region	48-74

**EFCAB4B Antibody (N-term) - Additional Information****Gene ID** 84766**Other Names**

EF-hand calcium-binding domain-containing protein 4B, Calcium release-activated calcium channel regulator 2A, CRAC channel regulator 2A, Calcium release-activated channel regulator 2A, CRACR2A, EFCAB4B

**Target/Specificity**

This EFCAB4B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 48-74 amino acids from the N-terminal region of human EFCAB4B.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

EFCAB4B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**EFCAB4B Antibody (N-term) - Protein Information****Name** CRACR2A ([HGNC:28657](#))

**Function** [Isoform 1]:  $\text{Ca}(2+)$ -binding protein that plays a key role in store-operated  $\text{Ca}(2+)$  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  $\text{Ca}(2+)$  concentration. It thereby regulates CRAC channel activation, including translocation and clustering of ORAI1 and STIM1. Upon increase of cytoplasmic  $\text{Ca}(2+)$  resulting from opening of CRAC channels, dissociates from ORAI1 and STIM1, thereby destabilizing the ORAI1-STIM1 complex.

**Cellular Location**

[Isoform 1]: Cytoplasm

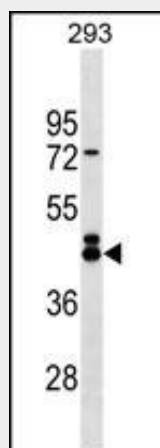
**Tissue Location**

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

**EFCAB4B Antibody (N-term) - 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 (N-term) - Images**

EFCAB4B Antibody (N-term) (Cat. #AP17969a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the EFCAB4B antibody detected the EFCAB4B protein (arrow).

**EFCAB4B Antibody (N-term) - Background**

$\text{Ca}(2+)$ -binding protein that plays a key role in store-operated  $\text{Ca}(2+)$  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  $\text{Ca}(2+)$  concentration. It thereby regulates CRAC channel activation, including translocation and clustering of ORAI1 and STIM1. Upon increase of cytoplasmic  $\text{Ca}(2+)$  resulting from opening of CRAC channels, dissociates from ORAI1 and STIM1, thereby

destabilizing the ORAI1-STIM1 complex.

#### **EFCAB4B Antibody (N-term) - References**

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Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :  
Srikanth, S., et al. Nat. Cell Biol. 12(5):436-446(2010)  
Aston, K.I., et al. J. Androl. 30(6):711-725(2009)  
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