



## Rabbit Anti-EFCAB4B antibody

SL14512R

<b>Product Name:</b>	EFCAB4B
<b>Chinese Name:</b>	EFCAB4B蛋白抗体
<b>Alias:</b>	EFCAB-4B; Calcium release-activated calcium channel regulator 2A; CRAC channel regulator 2A; CRACR2A; EF hand calcium binding domain 4B; EF hand calcium binding domain containing protein 4B; EF-hand calcium-binding domain-containing protein 4B; EFC4B HUMAN; EFCAB 4B; Efcab4b; FLJ33805; MGC4266.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Horse,Rabbit,Guinea Pig,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	46/83kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human EFCAB4B:201-300/1503
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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 <sup>2+</sup> 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.

**Function:**

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.

**Subcellular Location:**

Cytoplasm.

**Similarity:**

Belongs to the EFCAB4 family.  
Contains 2 EF-hand domains.

**SWISS:**

Q9BSW2

**Gene ID:**

74766

**Database links:**

[Entrez Gene: 84766](#) Human

[Entrez Gene: 381812](#) Mouse

[Omim: 614178](#) Human

[SwissProt: Q9BSW2](#) Human

[SwissProt: Q3UP38](#) Mouse

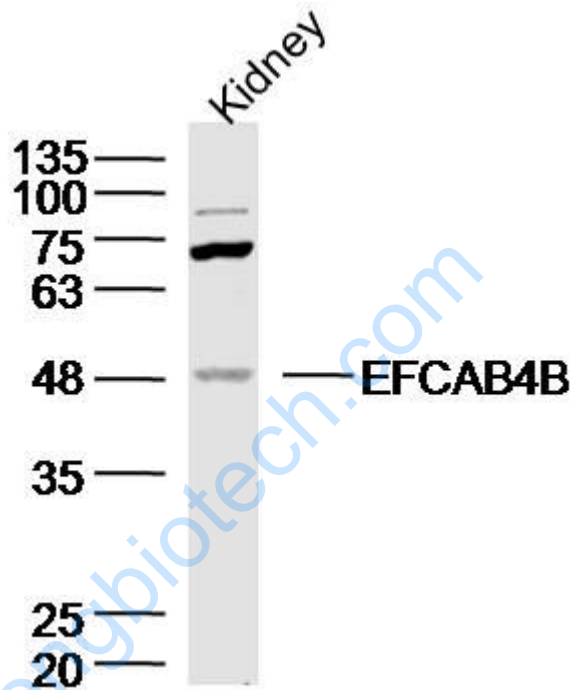
[Unigene: 504534](#) Human

[Unigene: 296093](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



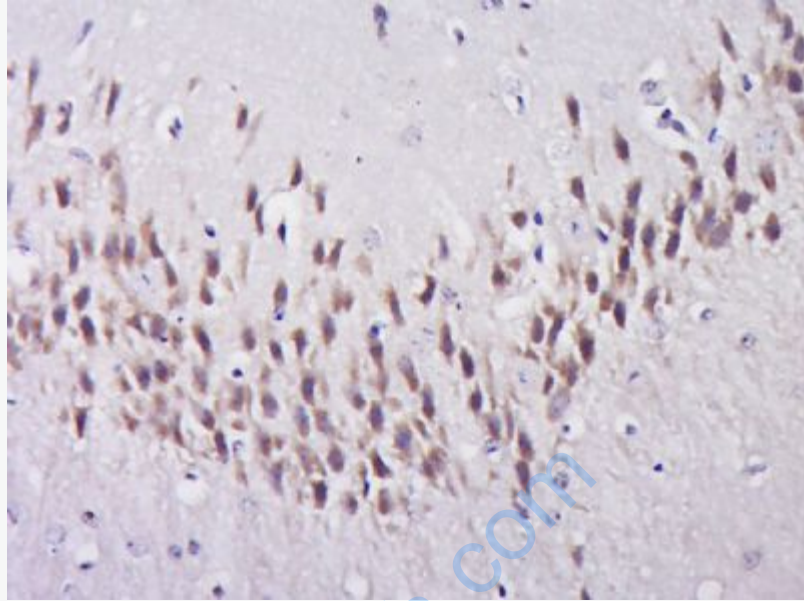
Sample: Kidney (Mouse) Lysate at 40 ug

Primary: Anti-EFCAB4B (SL14512R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46/83 kD

Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EFCAB4B) Polyclonal Antibody, Unconjugated (SL14512R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.