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[Primary Antibody]

Rabbit Anti-EFCAB4B antibody

Catalog Number: SL14512R

FOR RESEARCH USE ONLY

[DATASHEET]

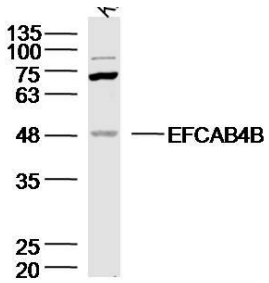
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	EFCAB4B
Immunogen:	KLH conjugated synthetic peptide derived from human EFCAB4B: 201-300/1503
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Mouse (predicted:Human,Rat,Horse,Rabbit,GuineaPig)
Predicted MW.:	46/83kDakDa
Subcellular Location:	cytoplasmic
Background:	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 Ca2+ 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

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

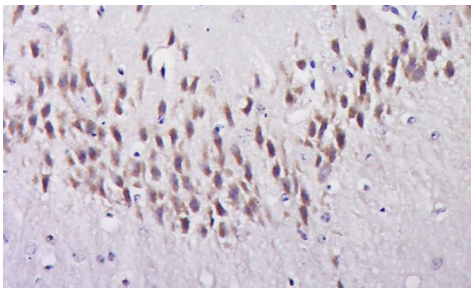
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	dysplasia. **Function:** Ca(2+)-binding protein that plays a key role in store-operated Ca(2+) entry (SOCE) in T-cells by regulating CRAC channel activation. Acts as a cytoplasmic calcium-sensor that facilitates the clustering of ORAI1 and STIM1 at 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. **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

[VALIDATION IMAGES]



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.

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