

Product datasheet for RC226784L3

OriGene Technologies, Inc.

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EFCAB4B (CRACR2A) (NM_001144958) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: EFCAB4B

Synonyms: EFCAB4B

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide Sequence: The ORF insert of this clone is exactly the same as(RC226784).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



			Kozak Consensus	
EcoR I	BamH I	RBS	Sgf I	ORF
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C				
	Mlu I	Not I Xho I	Myc.Tag	
NNŇ		CGG CCG CTC GAG		TCA GAA GAG
	TRT	R P L <u>E</u>	QKLI	S E E
DDK.Tag				
GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TGGGTAGGAAG				
D L A A N D I	L DYK	D D D D K	_	

^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001144958

ORF Size: 2193 bp





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OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um

filter is required.

RefSeq: <u>NM_001144958.1</u>

RefSeq ORF: 2196 bp

Locus ID: 84766

UniProt ID: Q9BSW2

Cytogenetics: 12p13.32

MW: 83 kDa

Gene Summary: 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 ORAII and STIMI at the junctional regions between the plasma membrane and the endoplasmic reticulum upon low Ca(2+) concentration. It thereby regulates CRAC channel

cytoplasmic Ca(2+) resulting from opening of CRAC channels, dissociates from ORAII and STIMI, thereby destabilizing the ORAII-STIMI complex.[UniProtKB/Swiss-Prot Function]

activation, including translocation and clustering of ORAII and STIMI. Upon increase of