

Product datasheet for **RC218317**

CABP (CABP1) (NM_031205) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CABP (CABP1) (NM_031205) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CABP
Synonyms:	CALBRAIN; HCALB_BR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218317 representing NM_031205 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAACTGTGTCAAGTATCCACTGAGAAATCTCTCAAGGAAGATGTGCCAGGAGGAACAGACCAGCT
ACATGGTGGTGCAGACGAGCGAGGAGGGCTGGCGGCTGACGCCGAGCTCCCGGACCGCTCCTGATGCT
GGCCAGAACTGCGCAGTCATGCACAACCTGCTGGGCCCTGCCTGCATTTTCTGCGCAAGGGCTTCGCT
GAGAACAGGCAGCCTGATAGTACTGCGACCAGAGGAAATTGAAGAGCTCCGAGAGGCCCTCAGAGAAT
TCGACAAGGACAAGGATGGCTACATCAACTGCCGGGATCTGGGCAACTGCATGCGCACCATGGGCTACAT
GCCACCAGAGATGGAGCTCATCGAACTGTCCAGCAGATCAACATGAACCTGGGTGGCCATGTAGATTTT
GATGACTTCGTGGAGCTAATGGGCCTAAACTCCTGGCAGAGACAGCAGATATGATTGGTGTAAAGGAAC
TGCGAGATGCTTTCCGAGAGTTTGACACCAATGGTGTGGGAAATAAGCACCAGTGAGCTGCGAGAGGC
TATGAGGAAGCTCCTGGGTATCAGGTGGGACACCGAGACATAGAGGAAATTATCCGAGATGTGGACCTC
AATGGGGATGGACGAGTGGACTTTGAAGAGTTTGTCCGGATGATGTCCCGC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218317 representing NM_031205
Red=Cloning site Green=Tags(s)

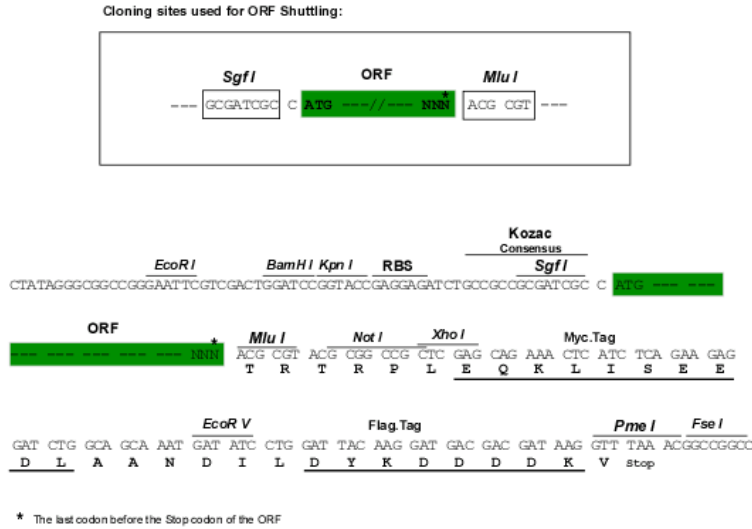
MGNCVKYPLRNL SRKMCQEEQTSYVVVQTSEEGLAADAELPGPLLMLAQNCAMVHNLGPACIFLRKGFA
 ENRQPDRSLRPEEIEELREAFREFDKDKDGYINCRDLGNCMRMTGYMPTEMELIELSQQINMNLGGHVDF
 DDFVELMGPKLLAETADMIGVKELRDAFREFDNNGDGEISTSELREAMRKLGHQVGHDRDIEEIIIRDVDL
 NGDGRVDFEEFVRMMSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8021_e02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031205

ORF Size: 681 bp

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.

RefSeq: [NM_031205.4](#)

RefSeq Size: 1201 bp

RefSeq ORF: 684 bp

Locus ID: 9478

UniProt ID: [Q9NZU7](#)

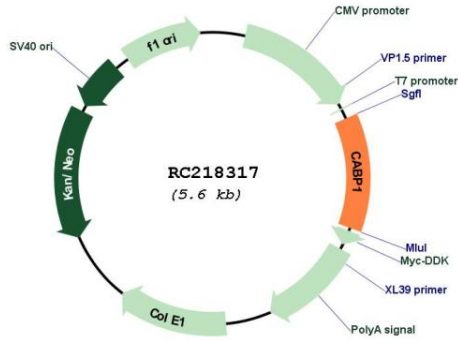
Cytogenetics: 12q24.31

Domains: EFh

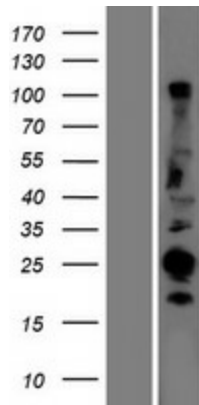
MW: 25.8 kDa

Gene Summary: Calcium binding proteins are an important component of calcium mediated cellular signal transduction. This gene encodes a protein that belongs to a subfamily of calcium binding proteins which share similarity to calmodulin. The protein encoded by this gene regulates the gating of voltage-gated calcium ion channels. This protein inhibits calcium-dependent inactivation and supports calcium-dependent facilitation of ion channels containing voltage-dependent L-type calcium channel subunit alpha-1C. This protein also regulates calcium-dependent activity of inositol 1,4,5-triphosphate receptors, P/Q-type voltage-gated calcium channels, and transient receptor potential channel TRPC5. This gene is predominantly expressed in retina and brain. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2012]

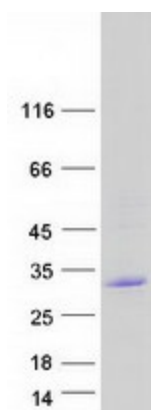
Product images:



Circular map for RC218317



Western blot validation of overexpression lysate (Cat# [LY410585]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218317 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CABP1 protein (Cat# [TP318317]). The protein was produced from HEK293T cells transfected with CABP1 cDNA clone (Cat# RC218317) using MegaTran 2.0 (Cat# [TT210002]).