OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC218949

DOC2B (NM_003585) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOC2B (NM_003585) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOC2B
Synonyms:	DOC2BL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC218949 representing NM_003585
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCCTCCGGCGGCGCGGGGAGAAGGCGACCATCAGCATCCAGGAGCATATGGCCATCGACGTGTGCC
CCGGCCCCATCCGTCCCATCAAGCAGATCTCCGACTACTTCCCCCGCTTCCCGCGGGGCCTGCCCCCGGA
CGCCGGGCCCCGAGCCGCTGCACCCCCGGACGCCCCCGCGCGCCCGGCTGTGGCCGGTGCCGGCCGCCGC
AGCCCCTCCGACGGCGCCCGCGAGGACGACGAGGATGTGGACCAGCTCTTCGGAGCCTACGGCTCCAGCC
CGGGCCCCAGCCCGGGTCCCAGCCCCGCGCGGCCGCCAGCCAAGCCGCCGGAGGACGAGCCGGACGCCGA
CGGCTACGAGTCGGACGACTGCACTGCCCTGGGCACGCTGGACTTCAGCCTGCTGTATGACCAGGAGAAC
AACGCCCTCCACTGCACCATCACCAAGGCCAAGGGCCTGAAGCCAATGGACCACAATGGGCTGGCAGACC
CCTACGTCAAGCTGCACCTGCTGCCAGGAGCCAGTAAGGCAAATAAGCTCAGAACAAAAACTCTCCGTAA
CACTCTGAACCCCACATGGAACGAGACCCTCACTTACTACGGGATCACAGATGAAGACATGATCCGCAAG
ACCCTGCGGATCTCTGTGTGTGACGAGGACAAATTCCGGCACAATGAGTTCATCGGGGAGACACGTGTGC
CCCTGAAGAAGCTGAAACCCAACCACACCAAGACCTTCAGCATCTGCCTGGAGAAGCAGCTGCCGGTGGA
CAAGACCGAAGACAAGTCCCTGGAGGAGCGGGGCCGCATCCTCATCTCGCTCAAGTACAGCTCACAGAAG
CAAGGCCTGCTGGTAGGCATCGTGCGGTGCGCCCACCTGGCCGCCATGGACGCCAACGGCTACTCGGACC
CCTACGTGAAAACATACCTGAGGCCAGATGTGGACAAGAAATCCAAACATAAGACAGCGGTGAAGAAAAA
AACCCTGAACCCGGAGTTTAATGAGGAGTTCTGTTACGAGATCAAGCATGGGGACCTGGCCAAGAAGTCC
CTGGAGGTCACCGTTTGGGATTACGACATTGGAAAATCCAACGATTTCATTGGTGGTGTGGTTCTGGGCA
TCCACGCCAAGGGGGAGCGCCTGAAGCACTGGTTTGACTGCCTGAAGAACAAGGACAAGCGCATCGAGCG
CTGGCACACGCTCACCAGCGAGCTCCCAGGGGCTGTGCTCAGCGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC218949 representing NM_003585
Red=Cloning site Green=Tags(s)

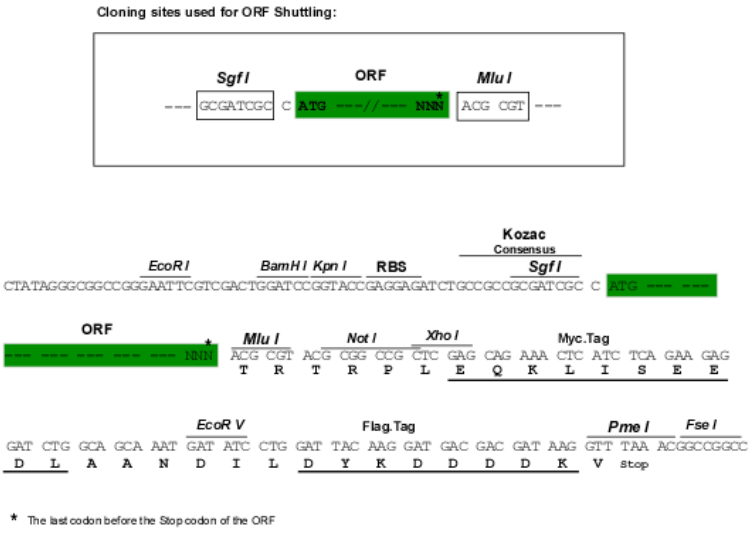
MTLRRRGEKATISIQEHMAIDVCPGPIRPIKQISDYFPRFPRGLPPDAGPRAAAPPDAPARPAVAGAGRR
SPSDGAREDDEDVDQLFGAYGSSPGPSPGPSPARPPAKPPEDEPDADGYESDDCTALGTLDFSLLYDQEN
NALHCTITKAKGLKPMDHNGLADPYVKLHLLPGASKANKLRTKTLRNTLNPTWNETLTYYGITDEDMIRK
TLRISVCDEDKFRHNEFIGETRVPLKKLKPNHTKTFSICLEKQLPVDKTEDKSLEERGRILISLKYSSQK
QGLLVGIVRCAHLAAMDANGYSDPYVKTYLRPDVDKKSKHKTAVKKKTLNPEFNEEFCYEIKHGDLAKKS
LEVTVWDYDIGKSNDFIGGVVLGIHAKGERLKHWFDCLKNKDKRIERWHTLTSELPGAVLSD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8022_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003585

ORF Size: 1236 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.

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

RefSeq: NM_003585.3

RefSeq Size: 2030 bp

RefSeq ORF: 1239 bp

Locus ID: 8447

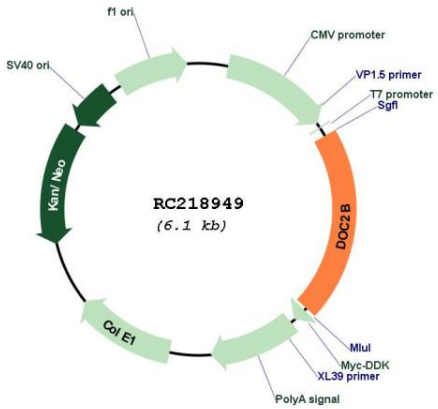
UniProt ID: Q14184

Cytogenetics: 17p13.3

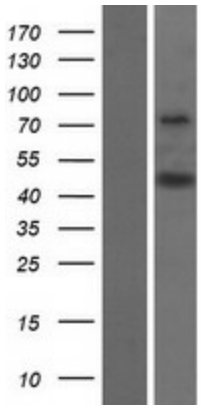
MW: 45.8 kDa

Gene Summary: There are at least two protein isoforms of the Double C2 protein, namely alpha (DOC2A) and beta (DOC2B), which contain two C2-like domains. DOC2A and DOC2B are encoded by different genes; these genes are at times confused with the unrelated DAB2 gene which was initially named DOC-2. DOC2B is expressed ubiquitously and is suggested to be involved in Ca(2+)-dependent intracellular vesicle trafficking in various types of cells. [provided by RefSeq, Jul 2008]

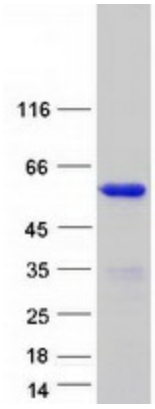
Product images:



Circular map for RC218949



Western blot validation of overexpression lysate (Cat# [LY418555]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218949 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DOC2B protein (Cat# [TP318949]). The protein was produced from HEK293T cells transfected with DOC2B cDNA clone (Cat# RC218949) using MegaTran 2.0 (Cat# [TT210002]).