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 RC208788

DOC2A (NM_003586) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOC2A (NM_003586) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOC2A
Synonyms:	Doc2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208788 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCCC

ATGAGGGGCCGCAGGGGCGATCGCATGACCATCAACATCCAGGAGCACATGGCCATCAACGTGTGCCCCG
GGCCCATCCGGCCCATCCGCCAGATCTCTGACTACTTCCCCCGGGGACCAGGACCTGAAGGGGGCGGCGG
GGGCGGCGGGGAGGCCCCCGCCCATCTGGTCCCCCTGGCTCTGGCCCCCCCTGCAGCCCTCCTTGGGGCC
ACCACGCCTGAGGATGGTGCGGAGGTGGACAGCTATGACTCGGATGATGCCACCGCCCTAGGCACGCTGG
AGTTTGACCTTCTCTACGACCGGGCCTCCTGCACTCTGCACTGTAGCATCCTCAGGGCCAAGGGCCTCAA
GCCCATGGATTTCAATGGCCTCGCCGACCCCTACGTCAAGCTGCACTTGCTGCCTGGAGCCTGTAAGGCC
AATAAGCTAAAAACGAAGACTCAGAGGAACACACTGAATCCCGTGTGGAATGAGGACCTGACTTACAGCG
GGATCACAGATGACGACATCACGCACAAGGTGCTCAGGATCGCCGTCTGTGATGAGGACAAGCTGAGTCA
CAATGAGTTTATTGGGGAGATCCGCGTGCCCCTCCGCCGCCTCAAGCCTTCGCAGAAGAAGCATTTTAAC
ATCTGCCTCGAGCGCCAGGTCCCGCTGGCGTCCCCCTCTTCCATGTCAGCGGCGCTGAGGGGCATCTCCT
GTTATCTGAAGGAGTTGGAGCAGGCGGAGCAGGGGCAGGGGCTGCTGGAGGAGCGTGGCCGCATCCTGCT
GAGTCTCAGCTACAGCTCGCGGCGCCGGGGACTGCTGGTAGGCATCTTGCGCTGCGCCCATCTGGCTGCC
ATGGACGTCAACGGTTACTCGGACCCCTACGTCAAGACGTACCTGAGGCCCGATGTGGACAAGAAATCCA
AGCATAAGACGTGTGTGAAGAAGAAGACTCTCAACCCAGAATTTAACGAGGAGTTTTTCTACGAGATAGA
GCTCTCCACTCTGGCCACCAAGACCCTGGAAGTCACCGTCTGGGACTATGACATTGGCAAATCCAATGAC
TTCATTGGTGGCGTGTCCCTGGGGCCAGGTGCCCGAGGCGAGGCTCGGAAGCACTGGAGTGACTGCCTGC
AGCAGCCGGACGCAGCCCTGGAGCGCTGGCACACCCTGACCAGTGAGCTGCCCCCTGCGGCCGGGGCTCT
GTCCTCAGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

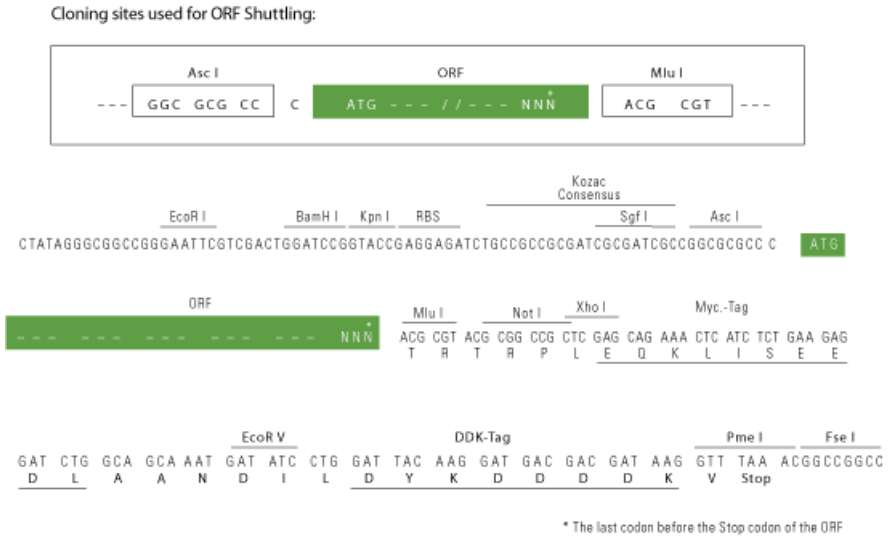
>RC208788 protein sequence
Red=Cloning site Green=Tags(s)

MRGRRGDRMTINIQEHMAINVCPGPIRPIRQISDYFPRGPGPEGGGGGGGEAPAHLVPLALAPPAALLGA
TTPEDGAEVDSYDSDDATALGTLEFDLLYDRASCTLHCSILRAKGLKPMDFNGLADPYVKLHLLPGACKA
NKLKTKTQRNTLNPVWNEDLTYSGITDDDITHKVLRIAVCDEDKLSHNEFIGEIRVPLRRLKPSQKKHFN
ICLERQVPLASPSSMSAALRGISCYLKELEQAEQGQGLLEERGRILLSLSYSSRRRGLLVGILRCAHLAA
MDVNGYSDPYVKTYLRPDVDKKSKHKTCVKKKTLNPEFNEEFFYEIELSTLATKTLEVTVWDYDIGKSND
FIGGVSLGPGARGEARKHWSDCLQQPDAALERWHTLTSELPPAAGALSSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: AscI-MluI

Cloning Scheme:



ACCN: NM_003586

ORF Size: 1200 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_003586.3

RefSeq Size: 2089 bp

RefSeq ORF: 1203 bp

Locus ID: 8448

UniProt ID: Q14183

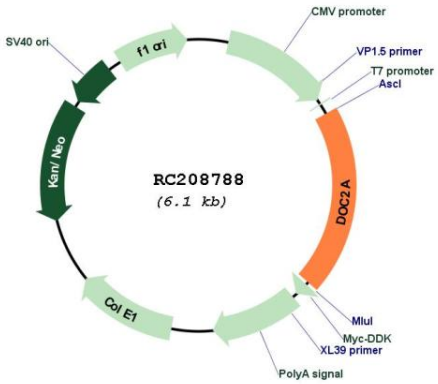
Cytogenetics: 16p11.2

Protein Families: Secreted Protein

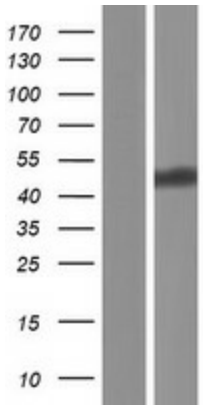
MW: 44 kDa

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. DOC2A is mainly expressed in brain and is suggested to be involved in Ca(2+)-dependent neurotransmitter release. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RC208788



Western blot validation of overexpression lysate (Cat# [LY418556]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208788 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).