

## Product datasheet for RC237986

### DOC2A (NM\_001282068) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DOC2A (NM_001282068) 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:	>RC237986 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

ATGAGGGGCGCAGGGGCGATCGCATGACCATCAACATCCAGGAGCACATGGCCATCAACGTGTGCCCCG  
GGCCATCCGGCCATCCGCCAGATCTCTGACTACTTCCCCGGGGACCAGGACCTGAAGGGGGCGCGG  
GGGCGGGGAGGCCCGCCATCTGGTCCCCTGGCTCTGGCCCCCTGCAGCCCTCCTTGGGGCC  
ACCACGCCTGAGGATGGTGGGAGGTGGACAGCTATGACTCGGATGATGCCACCGCCCTAGGCACGCTGG  
AGTTTGACCTTCTACGACCGGGCTCCTGCACTCTGCACTGTAGCATCCTCAGGGCCAAGGGCCTCAA  
GCCATGGATTTCAATGGCTCGCCGACCCTAGTCAAGCTGCACTTGCCTGGAGCCTGTAAGGCC  
AATAAGCTAAAAACGAAGACTCAGAGGAACACACTGAATCCCCTGTGGAATGAGGACCTGACTTACAGCG  
GGATCACAGATGACGACATCACGCACAAGGTGCTCAGGATCGCCGTCTGTGATGAGGACAAGCTGAGTCA  
CAATGAGTTTATTGGGGAGATCCGCGTGGCCCTCCGCCGCTCAAGCCTTCGCAGAAGAAGCATTTTAAC  
ATCTGCCTCGAGCGCCAGGTCCCCTGGCGTCCCCTCTTCCATGTGAGCGGCGCTGAGGGGCATCTCCT  
GTTATCTGAAGGAGTTGGAGCAGGCGGAGCAGGGGCGGGGCTGCTGGAGGAGCGTGGCCGATCCTGCT  
GAGTCTCAGCTACAGCTCGCGGCGCCGGGACTGCTGGTAGGCATCTTGGCTGCGCCCATCTGGCTGCC  
ATGGACGTCAACGGTTACTCGGACCCCTACGTCAAGACGTACCTGAGGCCGATGTGCAAGAAATCCA  
AGCATAAGACGTGTGTGAAGAAGAAGACTCTCAACCCAGAATTTAACGAGGAGTTTTTCTACGAGATAGA  
GCTCTCCACTCTGGCCACCAAGACCCTGGAAGTCAACCGTCTGGGACTATGACATTGGCAAATCCAATGAC  
TTCATTGGTGGCGTGTCCCTGGGGCCAGGTGCCGAGGCGAGGCTCGGAAGCACTGGAGTACTGCCTGC  
AGCAGCCGACGCAGCCCTGGAGCGCTGGCACACCCTGACCAGTGAAGTCTGCCCCCTGCGGCCGGGCTCT  
GTCCTCAGCC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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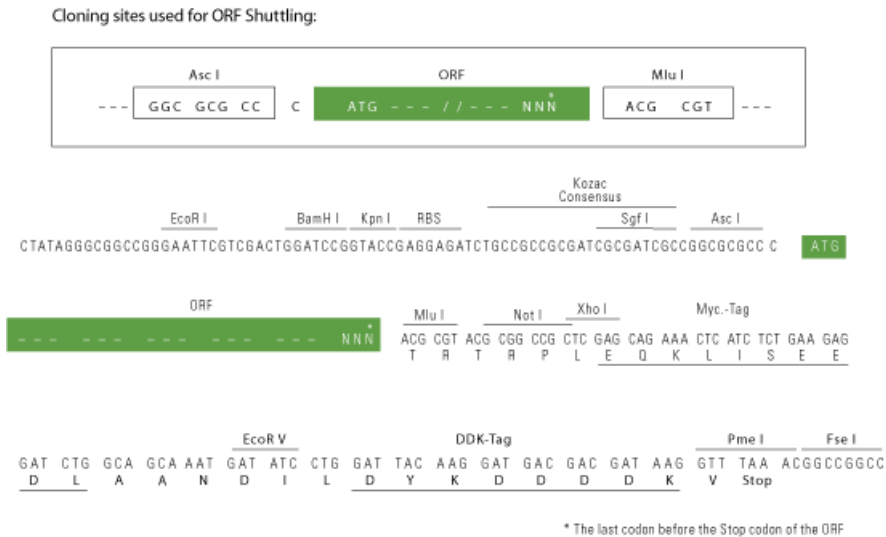
**Protein Sequence:** >RC237986 protein sequence  
Red=Cloning site Green=Tags(s)

MRGRRGDRMTINIQEHMAINVCVPIRPIRQISDYFPRGPGPEGGGGGGGEAPAHLVPLALAPPAALLGA  
 TTPEDGAEVDSYSDSDATALGTLDFDLLYDRASCTLHCSILRAKGLKPMDFNGLADPYVKLHLLPGACKA  
 NKLKTKTQRNTLNPVWNEDLTYSGITDDDITHKVLRIAVCDEDKLSHNEFIGEIRVPLRRLKPSQKKHFN  
 ICLEQVPLASPSMSAALRGISCYKLELEQAEQGGLEERGRILLSLSYSSRRRGLLVGILRCAHLAA  
 MDVNGYSDPYVKTYLRPDVDKSKHKTCVKKKTLNPEFNEEFFYEIELSTLATKTLVTVWDYDIGKSN  
 FGGVSLGPGARGEARKHWSDCQLQPPDAALERWHTLTSELPPAAGALSSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** AscI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001282068

**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\\_001282068.2](#)

**RefSeq Size:** 2055 bp

**RefSeq ORF:** 1203 bp

**Locus ID:** 8448

**UniProt ID:** [Q14183](#)

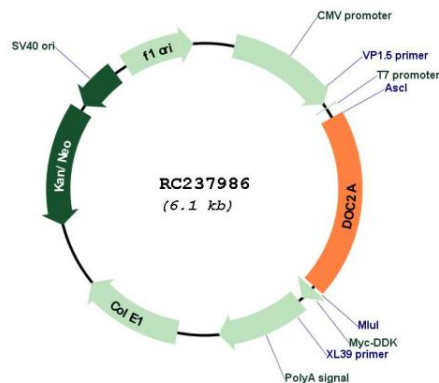
**Cytogenetics:** 16p11.2

**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 RC237986