

Product datasheet for MR206372

Doc2a (NM_010069) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Doc2a (NM_010069) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Doc2a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206372 representing NM_010069 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCCG
GCC

ATGAGGGGCCGAGGGCGATCGCATGACCATCAACATCCAGGAGCACATGGCCATCAACGTGTGCCCTG
GACCCATCAGGCCATCCGCCAGATCTCCGACTACTTCCCTCGCAGGGGGCCAGGACCAGAGGGTGGCGG
CGGCGCGGTGGCAGGGCTGCGGGGAAGCCCCAGCTCATCTGGCCCTCTGGCTCTGGCCCCCTGCG
GCTCTCCTTGGGGCCACTACACCCGACGATGGAGCTGAGGTAGACAGCTACGACTCGGATGATACACCC
CCCTGGGCACACTGGAATTTGACCTTCTCTATGATCAGGCTTCCCTGCATGCTGCACTGTAGAATCCCTCAG
GGCCAAGGGCCTCAAGCCATGGATTTCAATGGCCTGGCTGACCCCTATGTAAAGCTTCACTCCTGCCA
GGAGCCTGCAAGGCAATAAGCTAAAAACCAAGACACAGAGGAACACACTGAACCCTGTGTGGAATGAGG
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CGGGCGCATCCTGCTGAGCCTCAGCTACAGCTCTCGGCGGCATGGGCTGCTGGTGGGCATTGTTGCTGT
GCGCACCTGGCTGCAATGGATGTTAACGGCTACTCTGACCCTTATGTGAAGACGTAATGAGACCAGATG
TGGATAAGAAATCCAAGCACAAAACATGTGTAAGAAGAAGACACTAAATCCGGAATTTAATGAGGAATT
CTTCTATGAGATTGAACTCTCCACTCTGGCCACTAAGACCCTGGAGGTCACAGTCTGGGACTACGACATT
GGCAAATCCAATGACTTCATAGGTGGTGTGCTCTGGGGCCAGGAGCCCGGGGAGAGGCCAGAAACACT
GGAATGACTGTCTACATCAGCCGGACACAGCCCTGGAGCGCTGGCATACTCTGACCAGCGAGCTGCCCC
TGCAGCAGGGGCTTACCCTTTGGCT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206372 representing NM_010069
 Red=Cloning site Green=Tags(s)

MRGRRGDRMTINIQEHMAINVCPIRPIRQISDYFPRRGPPEGGGGGGTGCGEAPAHPLALAPPA
 ALLGATTPDDGAEVDSYSDDTTALGTLEFDLLYDQASCMLHCRILRAKGLKPMDFNGLADPYVKLHLLP
 GACKANKLKTKTQRNTLNPVWNEELTYSGITDDDIHKVLRISVCDEDKLSHNEFIGEIRVPLRRLKPSQ
 KKHFNICLERQVPLPSPSSMSAALRGISCYLKELEQAEQGPGLLEERGRILLSLSYSSRRHGLLVGIVRC
 AHLAAMDVNGYSDPYVKTYLRPDVDKSKHKTCVKKKTLNPEFNEEFFYEIELSTLATKTLLEVTVWDYDI
 GKSNDFIGGVSLGPGARGEAQKHWNDC LHQPDTALERWHTLTSELPPAAGAYPLA

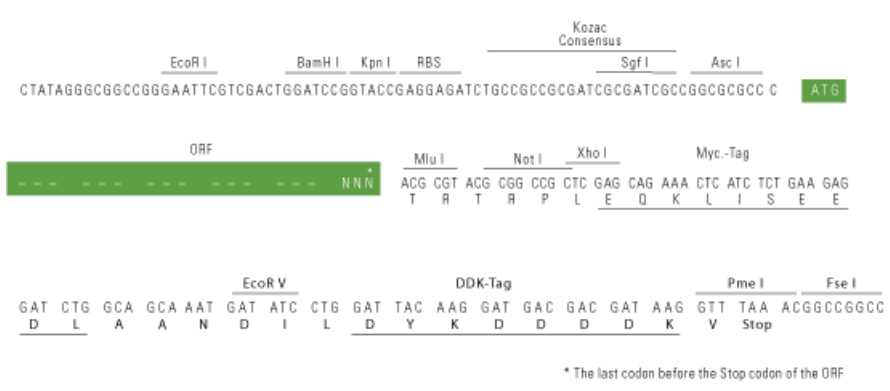
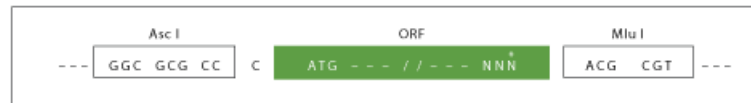
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9005_f03.zip

Restriction Sites: AscI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_010069

ORF Size: 1215 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_010069.1](#), [NP_034199.1](#)

RefSeq Size: 2557 bp

RefSeq ORF: 1218 bp

Locus ID: 13446

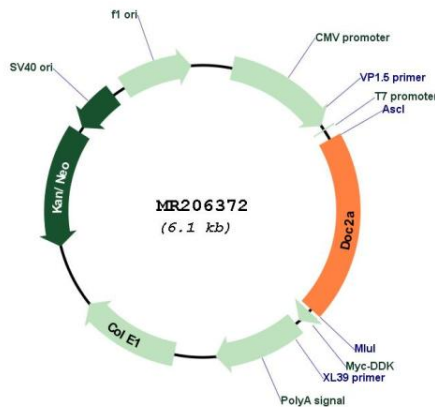
UniProt ID: [Q7TNF0](#)

Cytogenetics: 7 F3

MW: 45.1 kDa

Gene Summary: Calcium sensor which most probably regulates fusion of vesicles with membranes. Binds calcium and phospholipids. May be involved in calcium dependent neurotransmitter release through the interaction with UNC13A. May be involved in calcium-dependent spontaneous release of neurotransmitter in absence of action potentials in neuronal cells. Regulates Ca(2+)-dependent secretory lysosome exocytosis in mast cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206372