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Product datasheet for RC223182

DAP3 (NM_033657) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DAP3 (NM_033657) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DAP3
Synonyms:	bMRP-10; DAP-3; MRP-S29; MRPS29; S29mt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223182 representing NM_033657
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGCTGAAAGGAATAACAAGGCTTATCTCTAGGATCCATAAGTTGGACCCTGGGCGTTTTTTACACA
TGGGGACCCAGGCTCGCCAAAGCATTGCTGCTCACCTAGATAACCAGGTTCCAGTTGAGAGTCCGAGAGC
TATTTCCCGCACCAATGAGAATGACCCGGCCAAGCATGGGGATCAGCACGAGGGTCAGCACTACAACATC
TCCCCCCAGGATTTGGAGACTGTATTTCCCCATGGCCTTCCTCCTCGCTTTGTGATGCAGGTGAAGACAT
TCAGTGAAGCTTGCCTGATGGTAAGGAAACCAGCCCTAGAACTTCTGCATTACCTGAAAAACACCAGTTT
TGCTTATCCAGCTATACGATATCTTCTGTATGGAGAGAAGGGAACAGGAAAAACCCTAAGTCTTTGCCAT
GTTATTCATTTCTGTGCAAAACAGGACTGGCTGATACTACATATTCCAGATGCTCATCTTTGGGTGAAAA
ATTGTCGGGATCTTCTGCAGTCCAGCTACAACAAACAGCGCTTTGATCAACCTTTAGAGGCTTCAACCTG
GCTGAAGAATTTCAAAACTACAAATGAGCGCTTCCTGAACCAGATAAAAGTTCAAGAGAAGTATGTCTGG
AATAAGAGAGAAAGCACTGAGAAAGGGAGTCCTCTGGGAGAAGTGGTTGAACAGGGCATAACACGGGTGA
GGAACGCCACAGATGCAGTTGGAATTGTGCTGAAAGAGCTAAAGAGGCAAAGTTCTTTGGGTATGTTTCA
CCTCCTAGTGGCCGTGGATGGAATCAATGCTCTTTGGGGAAGAACCACTCTGAAAAGAGAAGATAAAAGC
CCGATTGCCCCCGAGGAATTAGCACTTGTTCACAACTTGAGGAAAATGATGAAAAATGATTGGCATGGAG
GCGCCATTGTGTCGGCTTTGAGCCAGACTGGGTCTCTCTTTAAGCCCCGGAAAGCCTATCTGCCCCAGGA
GTTGCTGGGAAAGGAAGGATTTGATGCCCTGGATCCCTTTATTCCCATCCTGGTTTCCAACTATAACCCA
AAGGAATTTGAAAGTTGTATTCAGTATTATTTGGAAAACAATTGGCTTCAACATGAGAAAGCTCCTACAG
AAGAAGGGAAAAAAGAGCTGCTGTTCCTAAGTAACGCGAACCCCTCGCTGCTGGAGCGGCACTGTGCCTA
CCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC223182 representing NM_033657
Red=Cloning site Green=Tags(s)

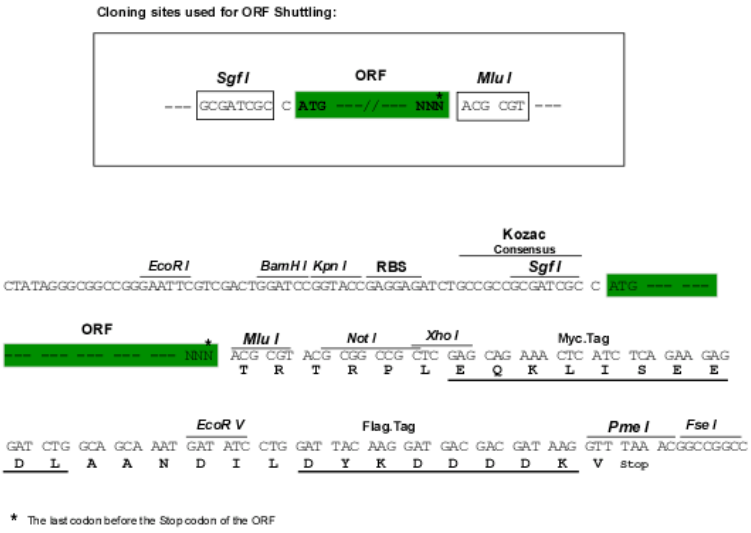
MMLKGITRLISRIHKLDPGRFLHMGTQARQSIAAHLDNQVPVESPRAISRTNENDPAKHGDQHEGQHYNI
SPQDLETVFPHGLPPRFVMQVKTFSEACLMVRKPALELLHYLKNTSFAYPAIRYLLYGEKGTGKTLSLCH
VIHFCAKQDWLILHIPDAHLWVKNCRDLLQSSYNKQRFDQPLEASTWLKNFKTTNERFLNQIKVQEKYVW
NKRESTEKGSPLGEVVEQGITRVRNATDAVGIVLKELKRQSSLGMFHLLVAVDGINALWGRTTLKREDKS
PIAPEELALVHNLRKMMKNDWHGGAIVSALSQTGSLFKPRKAYLPQELLGKEGFDALDPFIPILVSNYNP
KEFESCIQYYLENNWLQHEKAPTEEGKKELLFLSNANPSLLERHCAYL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6098_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033657

ORF Size: 1194 bp

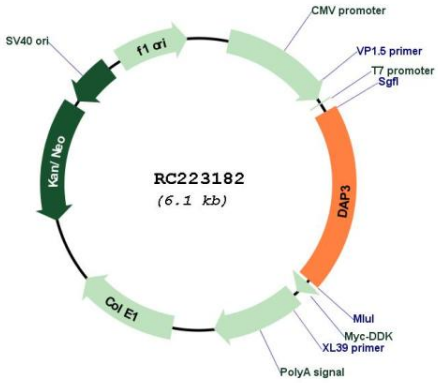
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

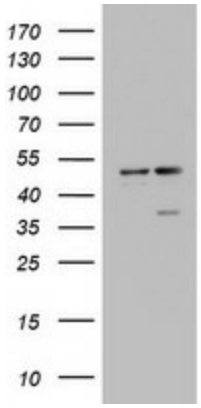
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_033657.2
RefSeq Size:	1650 bp
RefSeq ORF:	1197 bp
Locus ID:	7818
UniProt ID:	P51398
Cytogenetics:	1q22
Protein Families:	Druggable Genome
MW:	45.4 kDa
Gene Summary:	Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 28S subunit protein that also participates in apoptotic pathways which are initiated by tumor necrosis factor-alpha, Fas ligand, and gamma interferon. This protein potentially binds ATP/GTP and might be a functional partner of the mitoribosomal protein S27. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. Pseudogenes corresponding to this gene are found on chromosomes 1q and 2q. [provided by RefSeq, Dec 2010]

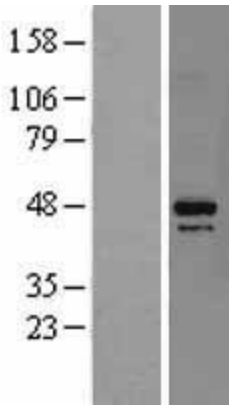
Product images:



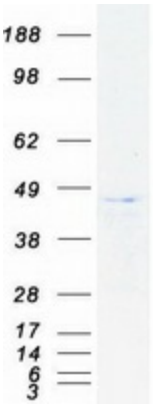
Circular map for RC223182



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DAP3 (Cat# RC223182, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DAP3(Cat# [TA802927]). Positive lysates [LY403256] (100ug) and [LC403256] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403256]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223182 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DAP3 protein (Cat# [TP323182]). The protein was produced from HEK293T cells transfected with DAP3 cDNA clone (Cat# RC223182) using MegaTran 2.0 (Cat# [TT210002]).