

Product datasheet for MR204995

Ubiad1 (BC015303) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ubiad1 (BC015303) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ubiad1
Synonyms:	1200002M06Rik; A1426463; AW320947; Tere1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204995 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCGGTACAGGCCCGGGGAGAAGATTAATATCCTGGCAGGAGAGACAGCCAAGGTCGGGGACC
CGCAGAAGAACGAATGGCCCGAGCAGGACAGGCTTCCCGAACGATCCTGGAGGCACAAGTGCCTCCTA
CGTGTGGCCCTGAGGCCCTGGAGCTTCAGTGCCTCACTACCCCTGTGGCCCTGGGCAGTGCCTTGGCC
TACAGGTCTCAGGGTGTCTGGATCCCAGGCTGTTGTTGGTTGTGCAGTGGCTGTCTGGCTGTACACG
GGCCCGCAATTTGGTCAACACATACTATGACTTTTCCAAGGCCATTGACCACAAAAGAGTGATGACAG
AACTTTGGTGGACAGAATTCTGGAGCCCCAGGATGTTGTTGCGATTGGAGTCTTCTCTACACCTTGGGC
TGGCTGTGTGCTGCTTGCCTCTACTACCTGTCCGCTCTGAAATTGGAACACTTGGCTCTCATCTACTTCG
GAGGCCTGTCTGGCTCCTTCTCTACACAGGAGGAATTGGATTCAAGTATGTGGCCCTGGGAGACCTCGT
CATCCTCATCACTTTGGCCCGCTGGCTGTGATGTTTGCCTACGCTGTCCAGGTGGGATCCCTGGCCATC
TTCCCTAATCTACGCCATCCCTCTGGCCCTCAGCACGGAGGCCATTCTCCATTCCAACAACACAGGG
ACATGGAATCTGACCGAGAGGCTGGCATCGTACGCTGGCCATCCTCATTGGGCCACCTTCTCCTATGT
CCTCTATAACACACTGCTCTTTGTGCCCTACCTAATCTTTACCATCCTGGCCACGCACTGCAGCATCAGC
CTGGCACTGCCCTGCTCACCATCCCCATGGCCTTCTCCCTTGAGAGGCAGTTCGCAGCCAGGCCCTTCA
ACAAGCTGCCCCAGAGGACAGCCAAGCTCAACCTCCTGCTGGGGCTTTTCTATGTCTTTGGCATCATCCT
GGCACCAGCAGGCAGCCTGCCAGACTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR204995 protein sequence
Red=Cloning site Green=Tags(s)

MAAVQAPGEKINILAGETAKVGDPPQKNEWPEQDRLPERSWRHKCASYVLALRPWSFSASLTPVALGSALA
 YRSQGVLDPRLLLGCVAVALAVHGAGNLVNTYYDFSKGIDHKKSDRTLVDRILEPQDVVRFVFLYTLG
 CVCAACLYYLSALKLEHLALYIFGGLSGSFLYTGIGFKYVALGDLVILITFGPLAVMFAYAVQVGLAI
 FPLIYAIPALSTEAILHSNTRDMESDREAGIVTLAILIGPTFSYVLYNTLLFVPLYIFITLATHCSIS
 LALPLLTIPMAFSLERQFRSQAFNKLPQRTAKLNLLLGLFYVFGIILAPAGSLPRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC015303

ORF Size: 1008 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: [BC015303](#), [AAH15303](#)

RefSeq Size: 2694 bp

RefSeq ORF: 1010 bp

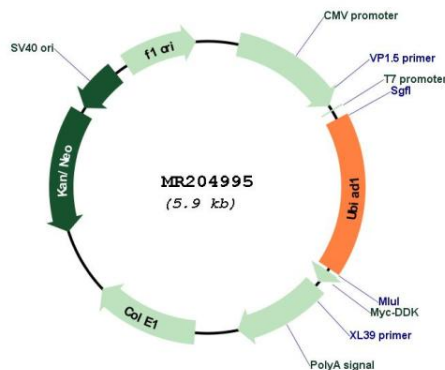
Locus ID: 71707

Cytogenetics: 4 E2

MW: 36.7 kDa

Gene Summary: Prenyltransferase that mediates the formation of menaquinone-4 (MK-4) and coenzyme Q10. MK-4 is a vitamin K2 isoform required for endothelial cell development. Mediates the conversion of phylloquinone (PK) into MK-4, probably by cleaving the side chain of phylloquinone (PK) to release 2-methyl-1,4-naphthoquinone (menadione; K3) and then prenylating it with geranylgeranyl pyrophosphate (GGPP) to form MK-4. Also plays a role in cardiovascular development independently of MK-4 biosynthesis, by acting as a coenzyme Q10 biosynthetic enzyme: coenzyme Q10, also named ubiquinone, plays an important antioxidant role in the cardiovascular system. Mediates biosynthesis of coenzyme Q10 in the Golgi membrane, leading to protect cardiovascular tissues from NOS3/eNOS-dependent oxidative stress (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204995