

## Product datasheet for **MG204986**

### Ubiad1 (BC071203) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ubiad1 (BC071203) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ubiad1
Synonyms:	1200002M06Rik; A1426463; AW320947; Tere1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204986 representing BC071203 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGCGGTACAGGCCCGGGGAGAAGATTAATATCCTGGCAGGAGAGACAGCCAAGGTCGGGGACC  
CGCAGAAGAACGAATGGCCCGAGCAGGACAGGTTTCCTGAACGATCCTGGAGGCACAAGTGCCTCCTA  
CGTGTGGCCCTGAGGCCCTGGAGCTTCAGTGCCTCACTACCCCTGTGGCCCTGGGCAGTGCCTTGGCC  
TACAGGCTCAGGGTGTCTGGATCCCAGGCTGTTGTTGGGTTGTGCAGTGGCTGTCTGGCTGTGCACG  
GGCCCGCAATTTGGTCAACACATACTATGACTTTTCCAAGGCCATTGACCACAAAAGAGTGATGACAG  
AACTTTGGTGGACAGAATTCTGGAGCCCGAGGATGTTGTTGCGATTGGAGTCTTCTCTACACCTTGGGC  
TGGCTGTGTGCTGCTTGCCTCTACTACTTGTCCGCTCTGAAATTGGAACACTTGGCTCTCATCTACTTCG  
GAGGCCTGTCTGGCTCCTTCTCTACACAGGAGGAATTGGATTCAAGTATGTGGCCCTGGGAGACCTCGT  
CATCCTCATCACTTTGGCCCGCTGGCTGTGATGTTTGCCTACGCTGTCCAGGTGGGATCCCTGGCCATC  
TTCCCTTAATCTACGCCATCCCTCTGGCCCTCAGCACGGAGGCCATTCTCCATTCCAACAACACAGGG  
ACATGGAATCTGACCGAGAGGCTGGCATCGTACGCTGGCCATCCTCATTGGGCCACCTTCTCCTATGT  
CCTCTATAACACACTGCTCTTTGTGCCCTACCTAATCTTTACCATCCTGGCCACGCACTGCAGCATCAGC  
CTGGCACTGCCCTGCTCACCATCCCCATGGCCTTCTCCCTTGAGAGGCAGTTCGCAGCCAGGCCCTTCA  
ACAAGCTGCCCCAGAGGACAGCCAAGCTCAACCTCCTGCTGGGGCTTTTCTATGTCTTTGGCATCATCCT  
GGCACCAGCAGGCAGCCTGCCAGACTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >MG204986 representing BC071203  
 Red=Cloning site Green=Tags(s)

MAAVQAPGEKINILAGETAKVGDQPQKNEWPEQDRFPERSWRHKCASYVLALRPWSFSASLTPVALGSALA  
 YRSQGVLDPRLLLGCVAVAVLAVHGAGNLVNTYYDFSKGIDHKKSDRTLVDRILEPQDVVRFVFLYTLG  
 CVCAACLYYL SALKLEHLAL IYFGGLSGSFLY TGGIGFKYVALGDLVILITFGPLAVMFAYAVQVGLAI  
 FPLIYAIPLALSTEAILHSNTRDMESDREAGIVTLAILIGPTFSYVLYNTLLFVPLYLIFTILATHCSIS  
 LALPLLTIPMAFSLERQFRSQAFNKL PQR T AKLNLLLGLFYVFGIILAPAGSLPRL

TRTRPLE - GFP Tag - V

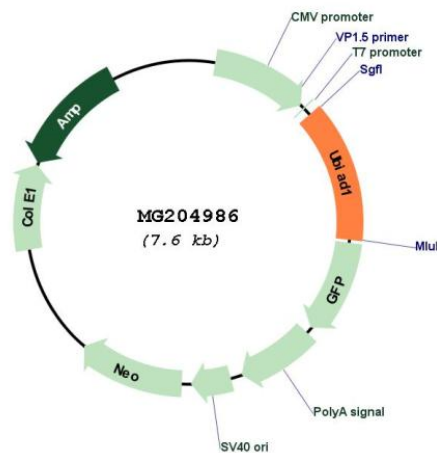
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** BC071203

**ORF Size:** 1010 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC071203</a> , <a href="#">AAH71203</a>
<b>RefSeq Size:</b>	2976 bp
<b>RefSeq ORF:</b>	1010 bp
<b>Locus ID:</b>	71707
<b>Cytogenetics:</b>	4 E2
<b>Gene Summary:</b>	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]