

## **Product datasheet for MR201097**

## Ube2n (NM\_080560) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Ube2n (NM\_080560) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Ube2n

**Synonyms:** 1500026J17Rik; AL022654; BB101821; UBC13

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR201097 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCCGGGCTGCCCCGCAGGATCATCAAGGAAACCCAGCGTTTGCTGGCAGAACCAGTTCCTGGCATTA
AAGCAGAACCAGATGAGAGCAACGCCCGTTATTTTCATGTGGTCATTGCTGGCCCCCAGGATTCCCCCTT
TGAGGGAGGGACTTTTAAACTTGAACTATTCCTTCCAGAAGAATACCCAATGGCAGCACCTAAAGTACGT
TTCATGACCAAAATTTATCATCCTAATGTAGACAAGTTGGGAAGAATATGTTTAGATATTTTGAAAGATA
AGTGGTCCCCAGCACTGCAGATCCGCACAGTTCTGCTATCAATCCAGGCTTTGTTAAGTGCTCCTAATCC
AGATGATCCATTAGCAAATGTAGCCGAGCAATGGAAGACCAACGAAGCCCAAGCCATAGAAACAGCG

AGAGCATGGACTAGGCTATATGCCATGAACAATATT

 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201097 protein sequence

Red=Cloning site Green=Tags(s)

MAGLPRRIIKETQRLLAEPVPGIKAEPDESNARYFHVVIAGPQDSPFEGGTFKLELFLPEEYPMAAPKVR FMTKIYHPNVDKLGRICLDILKDKWSPALQIRTVLLSIQALLSAPNPDDPLANDVAEQWKTNEAQAIETA

RAWTRLYAMNNI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

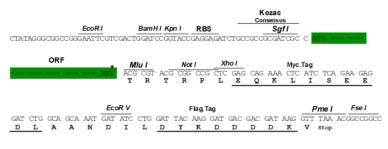
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_080560

ORF Size: 459 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: <u>NM 080560.3</u>, <u>NP 542127.1</u>

RefSeq Size: 3851 bp
RefSeq ORF: 459 bp
Locus ID: 93765
UniProt ID: P61089



Cytogenetics:

10 C2

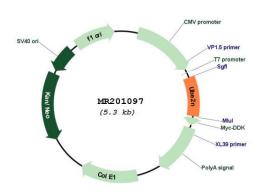
MW:

17.1 kDa

Gene Summary:

The UBE2V1-UBE2N and UBE2V2-UBE2N heterodimers catalyze the synthesis of non-canonical 'Lys-63'-linked polyubiquitin chains (PubMed:22424771, PubMed:28039360). This type of polyubiquitination does not lead to protein degradation by the proteasome. Mediates transcriptional activation of target genes. Plays a role in the control of progress through the cell cycle and differentiation. Plays a role in the error-free DNA repair pathway and contributes to the survival of cells after DNA damage. Acts together with the E3 ligases, HLTF and SHPRH, in the 'Lys-63'-linked poly-ubiquitination of PCNA upon genotoxic stress, which is required for DNA repair. Appears to act together with E3 ligase RNF5 in the 'Lys-63'-linked polyubiquitination of JKAMP thereby regulating JKAMP function by decreasing its association with components of the proteasome and ERAD. Promotes TRIM5 capsid-specific restriction activity and the UBE2V1-UBE2N heterodimer acts in concert with TRIM5 to generate 'Lys-63'-linked polyubiquitin chains which activate the MAP3K7/TAK1 complex which in turn results in the induction and expression of NF-kappa-B and MAPK-responsive inflammatory genes. [UniProtKB/Swiss-Prot Function]

## **Product images:**



Circular map for MR201097