

Product datasheet for **MR200987**

Ube2d3 (NM_025356) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ube2d3 (NM_025356) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ube2d3
Synonyms: 1100001F19Rik; 9430029A22Rik; AA414951
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR200987 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCTGAAACGGATTAATAAGGAAGCTAGTGATTTGGCCCGTGACCCTCCAGCACAATGTTCTGCAG
 GTCCAGTTGGAGATGACATGTTTCATTGGCAAGCCACAATTATGGGACCTAATGACAGCCCATATCAAGG
 TGGTGTATTCTTTTGACAATTCATTTTCCTACAGACTACCCCTTCAAACCACTAAGGTTGCATTTACA
 ACAAGAATTTATCATCCAAATATTAACAGTAATGGCAGCATTTGTCTTGATATTCTAAGATCACAGTGGT
 CTCCTGCTTTAACTATTTCTAAAGTTCTTTATCCATTTGTTCACTGCTATGTGATCCAAACCCAGACGA
 CCCCTAGTGCCAGAGATTGCACGGATCTATAAACAGACAGAGATAAGTACAACAGAATATCTCGGGA
 TGGACTCAGAAGTATGCCATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR200987 protein sequence
 Red=Cloning site Green=Tags(s)

MALKRINKELSDLARDPPAQCSAGPVGDDMFHWQATIMGPNDSPYQGGVFFLTIHFPTDYPFKPPKVAFT
 TRIYHPNINSNGSICLDILRSQWSPAL TISKVLLSICLLCDPNPDDPLVPEIARIYKTRDKYNRISRE
 WTQKYAM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:



ACCN: NM_025356

ORF Size: 441 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_025356.5](#)

RefSeq Size: 2619 bp

RefSeq ORF: 444 bp

Locus ID: 66105

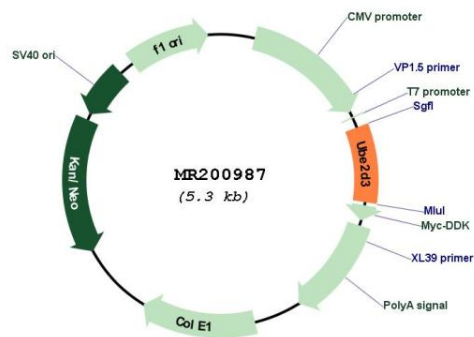
UniProt ID: [P61079](#)

Cytogenetics: 3 G3

MW: 16.7 kDa

Gene Summary: Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-11', as well as 'Lys-48'-linked polyubiquitination. Cooperates with the E2 CDC34 and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. Acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Ubiquitin chain elongation is then performed by CDC34, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. Acts also as an initiator E2, in conjunction with RNF8, for the priming of PCNA. Monoubiquitination of PCNA, and its subsequent polyubiquitination, are essential events in the operation of the DNA damage tolerance (DDT) pathway that is activated after DNA damage caused by UV or chemical agents during S-phase. Associates with the BRCA1/BARD1 E3 ligase complex to perform ubiquitination at DNA damage sites following ionizing radiation leading to DNA repair. Targets DAPK3 for ubiquitination which influences promyelocytic leukemia protein nuclear body (PML-NB) formation in the nucleus. In conjunction with the MDM2 and TOPORS E3 ligases, functions ubiquitination of p53/TP53. Supports NRDP1-mediated ubiquitination and degradation of ERBB3 and of BRUCE which triggers apoptosis. In conjunction with the CBL E3 ligase, targets EGFR for polyubiquitination at the plasma membrane as well as during its internalization and transport on endosomes. In conjunction with the STUB1 E3 quality control E3 ligase, ubiquitinates unfolded proteins to catalyze their immediate destruction.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR200987