

Product datasheet for **MR224630**

Ube3a (NM_011668) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ube3a (NM_011668) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ube3a
Synonyms:	4732496B02; 5830462N02Rik; A130086L21Rik; Hpve6a; mKIAA4216
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR224630 representing NM_011668
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACAGCTTGTAAAAGATCACCAGGAGAATCCCAGTCTGAGGACATTGAAGCTAGCCGAATGAAGC
 GAGCAGCTGCAAAGCATCTAATAGAACGCTACTACCATCAGTTAACTGAGGGCTGTGAAAATGAGGCCTG
 CACGAATGAGTTTTGTGCTTCTGTCCAACCTTTCTTCGTATGGATAACAATGCAGCAGCTATTAAGCC
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ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR224630 representing NM_011668
 Red=Cloning site Green=Tags(s)

MATACKRSPGESQSEDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTFLRMDNNAAAIKA
 LELYKINAKLCDPHPSKKGASSAYLENSKGASNNSEIKMNKKEGKDFKDVIIYLTEEKVYIEYFCRESED
 YSPLIRVIGRIFSSAEALVLSFRKVKQHTKEELKSLQEKDEKDEDEKEKAACSAAMEEDSEASSSRMG
 DSSQGDNNVQKLGPDVTVDIDAIRRVYSSLLANEKLETAFLNALVYLSPNVECDLTYHNVYTRDPNYLN
 LFIIVMENSNLHSPYELEMALPLFCKAMCKLPLEAQGKLI RLWSKYSADQIRRMETFQQLITYKVISNE
 FNSRNLVNDDDAIVAASKCLKMYYANVVGVDVTDNHNEEDDEEPIPESELTLQELLGDERRNKKGPRV
 DPLETELGVKTLDCRKLISFEFINEPLNDVLEMDKYTFKVVETENKFSFMTCPFILNAVTKNLGLYY
 DNRIRMYSEERRITVLYSLVQGGQLNPYLRKVRDHIIDDALVRLEMIAMENPADLKKQLYVEFEGEQGV
 DEGGVSKEFFQLVVEEIFNPDIGMFTYDEATKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFFM
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 TNENRKEFVNLYSYILNKSVEKQKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDQALEETTE
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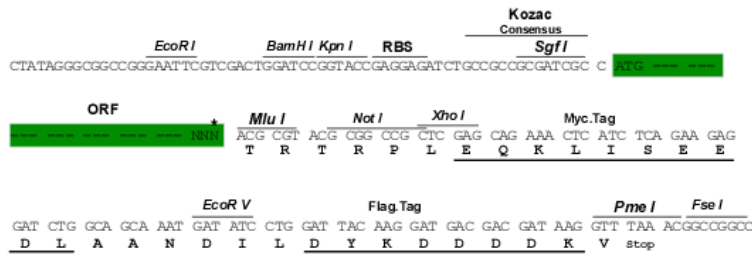
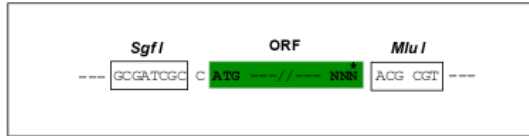
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9034_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

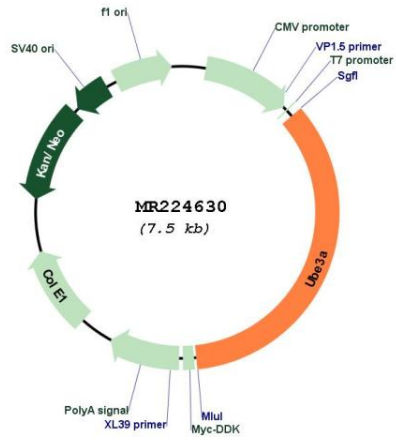
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:	NM_011668
ORF Size:	2610 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:	<ol style="list-style-type: none">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:	NM_011668.3
RefSeq Size:	5097 bp
RefSeq ORF:	2613 bp
Locus ID:	22215
UniProt ID:	O08759
Cytogenetics:	7 33.95 cM
MW:	100.3 kDa
Gene Summary:	<p>E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and transfers it to its substrates. Several substrates have been identified including the ARNTL/BMAL1, ARC, RAD23A and RAD23B, MCM7 (which is involved in DNA replication), annexin A1, the PML tumor suppressor, and the cell cycle regulator CDKN1B (PubMed:20211139, PubMed:24728990). Additionally, may function as a cellular quality control ubiquitin ligase by helping the degradation of the cytoplasmic misfolded proteins. Finally, UBE3A also promotes its own degradation in vivo (By similarity). Plays an important role in the regulation of the circadian clock: involved in the ubiquitination of the core clock component ARNTL/BMAL1, leading to its proteasomal degradation (PubMed:24728990). Acts as a regulator of synaptic development by mediating ubiquitination and degradation of ARC (PubMed:20211139). Synergizes with WBP2 in enhancing PGR activity (By similarity).</p> <p>[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR224630