

Product datasheet for **RC216727**

UBE3A (NM_000462) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UBE3A (NM_000462) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UBE3A
Synonyms:	ANCR; AS; E6-AP; EPVE6AP; HPVE6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216727 representing NM_000462
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGAAGCTGCACCAGTGTTATTGGAATCAGGAGAACCTCAGTCTGACGACATTGAAGCTAGCCGAA
 TGAAGCGAGCAGCTGCAAAGCATCTAATAAGAACGCTACTACCACAGTTAACTGAGGGCTGTGGAATGA
 AGCCTGCACGAATGAGTTTTGTGCTTCCTGTCCAACCTTTCTTCGTATGGATAAATGCAGCAGCTATT
 AAAGCCCTCGAGCTTTATAAGATTAATGCAAACTCTGTGATCCTCATCCCTCCAAGAAAGGAGCAAGCT
 CAGCTTACCTTGAGAACTCGAAAGGTGCCCAACAACCTCTGCTCTGAGATAAAAATGAACAAGAAAGG
 CGCTAGAATTGATTTAAAGATGTGACTTACTTAACAGAAGAGAAGGTATATGAAATTTGAAATTATGT
 AGAGAAAGAGAGGATTATCCCCTTAATCCGTGTTATTGGAAGAGTTTTTCTAGTGTGAGGCATTGG
 TACAGAGCTTCCGAAAGTTAAACAACACACCAAGGAAGAAGTGAATCTCTCAAGCAAAAGATGAAGA
 CAAAGATGAAGATGAAAAGGAAAAGCTGCATGTTCTGCTGCTGATGGAAGAAGACTCAGAAGCATCT
 TCCTCAAGGATAGGTGATAGCTCACAGGGAGACAACAATTTGCAAAAATAGGCCCTGATGATGTGTCTG
 TGGATATTGATGCCATTAGAAGGTCTACACCAGATTGCTCTCTAATGAAAAATGAAACTGCCTTTCT
 CAATGCACTTGTATATTTGTACCTAACGTGGAATGTGACTTGACGTATCACAATGTATACTCTCGAGAT
 CCTAATTATCTGAATTTGTTTATTATCGTAATGGAGAATAGAAATCTCCACAGTCTGAATATCTGGAAA
 TGGCTTTGCCATTATTTGCAAAGCGATGAGCAAGCTACCCCTTGAGCCCAAGGAAAAGTATCAGACT
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 GTCATAAGCAATGAATTTAACAGTCGAAATCTAGTGAATGATGATGATGCCATTGTTGCTGCTCGAAGT
 GCTTGAATGGTTTACTATGCAATGTAGTGGGAGGGGAAAGTGGACACAATCACAATGAAGAATGA
 TGAAGAGCCCATCCCTGAGTCCAGCGAGCTGACACTTCAGGAACCTTTGGGAGAAGAAAGAAACAAG
 AAAGTCTCGAGTGGACCCCTGGAACTGAACTGGTGTAAAAACCCTGGATTGTCGAAAACCTTA
 TCCCTTTGAAGAGTTTATTAATGAACCACTGAATGAGTTCTAGAAATGGATAAAGATTACTTTTTT
 CAAAGTAGAAACAGAGAACAATTTCTTTTTATGACATGTCCCTTTATATTGAATGCTGTCACAAAGAA
 TTGGGATTATATTATGACAATAGAATTCGCATGTACAGTGAACGAAGAATCACTGTTCTCTACAGCTTAG
 TTCAAGGACAGCAGTTGAATCCATATTTGAGACTCAAAGTTAGACGTGACCATATCATAGATGATGCACT
 TGTCCGGCTAGAGATGATCGCTATGAAAAATCCTGCAGACTTGAAGAAGCAGTTGATGTGGAATTTGAA
 GGAGAACAAGGAGTTGATGAGGGAGGTGTTTCCAAGAATTTTTTCAGCTGGTTGTGGAGGAAATCTTCA
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 AACTGAGGGTCAGTTTACTCTGATTGGCATAAGTACTGGGTCTGGCTATTTACAATAACTGTATACTGGAT
 GTACATTTTCCATGGTTGTCTACAGGAAGCTAATGGGGAAAAAGGAACTTTTCGTGACTTGGGAGACT
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 GATAAAATCCAATTACAAATGAAAACAGGAAGGAATTTGTCAATCTTTATTCTGACTACATTCTCAATA
 AATCAGTAGAAAAACAGTTCAAGGCTTTTCGGAGAGGTTTTTATATGTTGGAAGCCGGAATCTAGATTTCCAAGCACTA
 GAAGAAACTACAGAATATGACGGTGGCTATACCAGGGACTCTGTTCTGATTAGGGAGTTCTGGGAAATCG
 TTCATTATTTACAGATGAACAGAAAAGACTCTTCTTGCAGTTTACAACGGGCACAGACAGACACCTGT
 GGGAGGACTAGGAAAATTAAGATGATTATAGCCAAAAATGGCCAGACACAGAAAGGTTACCTACATCT
 CATACTTGCTTTAATGTGCTTTTACTTCCGGAATACTCAAGCAAAAGAAAACTTAAAGAGAGATTGTTGA
 AGGCCATCACGTATGCCAAAGGATTTGGCATGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216727 representing NM_000462
 Red=Cloning site Green=Tags(s)

MEKLNHCYWKSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTFLRMDNNAAI
 KALELYKINAKLCDPHPSKKGASSAYLENSKGAPNNSCSEIKMNKKGARIDFKDVTYLTEEKVYEILELC
 REREDYSPLIRVIGRVFSSAEALVQSFVKVQHTKEELKSLQAKDEDKDEDEKEKAACSAAMEEDSEAS
 SSRIGDSSQGDNNLKQLGPDDVSDVIDAIRRVYTRLLSNEKIETAFNLALVYLSPNVECDLTYHNVSYSR
 PNYLNLFIIVMENRNLHSPYELMALPLFCKAMSKLPLAAQGKLIIRLWSKYNADQIRMMETFQQLITYK
 VISNEFNRRNLVNDDDAIWAASKCLKMYYANVVGGEVDTNHNEEDDEEPIPESELTLQELLGEERRNK
 KGRPRVDPLETELGVKTLDCRKPLIPFEFENEPLNEVLEMDKYTFKVVETENKFSFMTCPFILNAVTKN
 LGLYYDNIRIMYSERRITVLYSLVQGGQLNPYLRKLVRRDHIIDDALVRLEMIAMENPADLKKQLYVEFE
 GEQGVDEGGVSKFEFFQLVVEEIFNPDIGMFTYDESTKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILD
 VHFPMVVYRKLGMKKGTFRDLGDSHPVLVQSLKDLLEYEGNVEDMMITFQISQTDLFGNPMYDLKENG
 DKIPITNENRKEFVNLVSDYILNKSVEKQKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDLQAL
 EETTEYDGGYTRDSVLIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGGLKLMIIAKNGPDTERLPTS
 HTCENVLLLPEYSSKEKLERLLKAITYAKGFGLM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6204_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

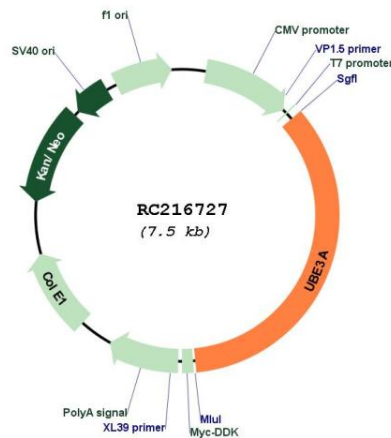


* The last codon before the Stop codon of the ORF

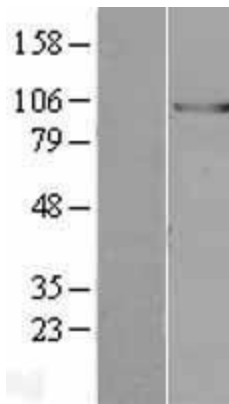
ACCN:	NM_000462
ORF Size:	2625 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000462.5
RefSeq Size:	4516 bp
RefSeq ORF:	2628 bp
Locus ID:	7337
UniProt ID:	Q05086
Cytogenetics:	15q11.2
Domains:	HECT
Protein Families:	Druggable Genome
Protein Pathways:	Ubiquitin mediated proteolysis
MW:	100.5 kDa

Gene Summary:

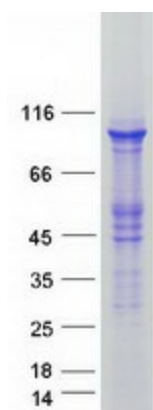
This gene encodes an E3 ubiquitin-protein ligase, part of the ubiquitin protein degradation system. This imprinted gene is maternally expressed in brain and biallelically expressed in other tissues. Maternally inherited deletion of this gene causes Angelman Syndrome, characterized by severe motor and intellectual retardation, ataxia, hypotonia, epilepsy, absence of speech, and characteristic facies. The protein also interacts with the E6 protein of human papillomavirus types 16 and 18, resulting in ubiquitination and proteolysis of tumor protein p53. Alternative splicing of this gene results in three transcript variants encoding three isoforms with different N-termini. Additional transcript variants have been described, but their full length nature has not been determined. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC216727



Western blot validation of overexpression lysate (Cat# [LY400164]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216727 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UBE3A protein (Cat# [TP316727]). The protein was produced from HEK293T cells transfected with UBE3A cDNA clone (Cat# RC216727) using MegaTran 2.0 (Cat# [TT210002]).