

## Product datasheet for **RC213039**

### **UBE3A (NM\_130839) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	UBE3A (NM_130839) 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:**

>RC213039 representing NM\_130839  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCACAGCTTGTAAAAGATCAGGAGAACCTCAGTCTGACGACATTGAAGCTAGCCGAATGAAGCGAG  
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 GAATGAGTTTTGTGCTTCTGTCCAACCTTTTCTCGTATGGATAATAATGCAGCAGCTATTAAGCCCTC  
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 CGTATGCCAAAGGATTTGGCATGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC213039 representing NM\_130839  
 Red=Cloning site Green=Tags(s)

MATACKRSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTFLRMDNAAAIAKAL  
 ELYKINAKLCDPHPSKKGASSAYLENSKAPNNSCSEIKMKNKGARIDFKDVTYLTEEKVYEILELCRER  
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 LNFLIIVMENRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLIRLWSKYNADQIRRMETFQQLITYKVIS  
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**Restriction Sites:**

Sgfl-MluI

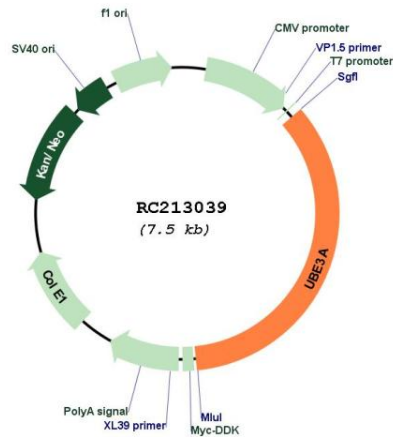
**Cloning Scheme:**



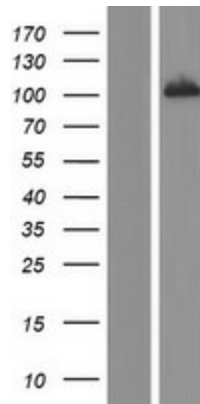
<b>ACCN:</b>	NM_130839
<b>ORF Size:</b>	2616 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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="#">NM_130839.5</a>
<b>RefSeq Size:</b>	5211 bp
<b>RefSeq ORF:</b>	2619 bp
<b>Locus ID:</b>	7337
<b>UniProt ID:</b>	<a href="#">Q05086</a>
<b>Cytogenetics:</b>	15q11.2
<b>Domains:</b>	HECT
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Ubiquitin mediated proteolysis
<b>MW:</b>	100.1 kDa

**Gene Summary:**

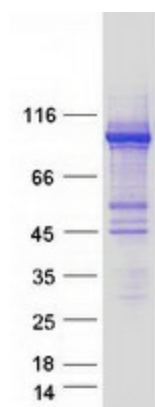
This gene encodes an E3 ubiquitin-protein ligase, part of the ubiquitin protein degradation system. This imprinted gene is maternally expressed in brain and biallelically expressed in other tissues. Maternally inherited deletion of this gene causes Angelman Syndrome, characterized by severe motor and 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 RC213039



Western blot validation of overexpression lysate (Cat# [LY408892]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213039 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UBE3A protein (Cat# [TP313039]). The protein was produced from HEK293T cells transfected with UBE3A cDNA clone (Cat# RC213039) using MegaTran 2.0 (Cat# [TT210002]).