

## Product datasheet for **RC201288**

### UBA2 (NM\_005499) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	UBA2 (NM_005499) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UBA2
Synonyms:	ARX; HRIHFB2115; SAE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201288 representing NM\_005499  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
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**Protein Sequence:** >RC201288 representing NM\_005499  
Red=Cloning site Green=Tags(s)

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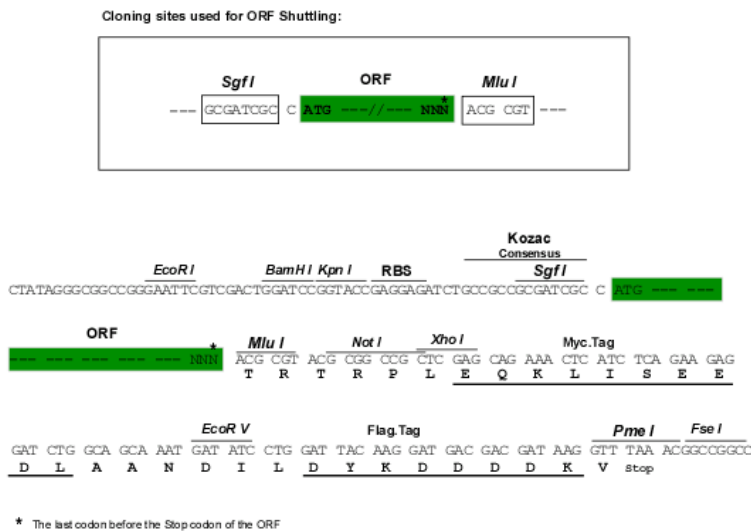
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EELDDVIALD
  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2889\\_b01.zip](https://cdn.origene.com/chromatograms/mg2889_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005499

**ORF Size:** 1920 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\\_005499.1](#)

**RefSeq Size:** 2682 bp

**RefSeq ORF:** 1923 bp

**Locus ID:** 10054

**UniProt ID:** [Q9UBT2](#)

**Cytogenetics:** 19q13.11

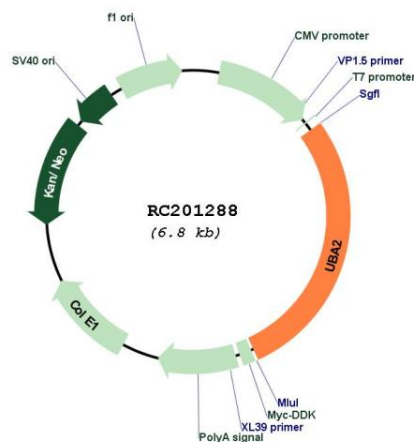
**Domains:** UBACT, ThiF

**Protein Pathways:** Ubiquitin mediated proteolysis

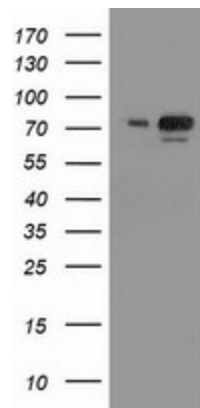
**MW:** 71 kDa

**Gene Summary:** Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 (MIM 613294) and UBA2 form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins (Okuma et al., 1999 [PubMed 9920803]). [supplied by OMIM, Mar 2010]

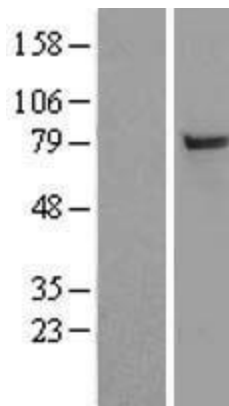
## Product images:



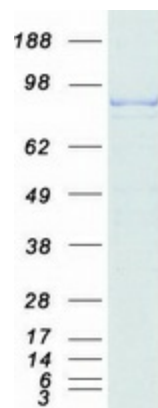
Circular map for RC201288



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UBA2 (Cat# RC201288, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-UBA2 (Cat# [TA502504]). Positive lysates [LY417267] (100ug) and [LC417267] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417267]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201288 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UBA2 protein (Cat# [TP301288]). The protein was produced from HEK293T cells transfected with UBA2 cDNA clone (Cat# RC201288) using MegaTran 2.0 (Cat# [TT210002]).