

## **Product datasheet for RC218795**

## UBE2D2 (NM 003339) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** UBE2D2 (NM\_003339) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: UBE2D2

Synonyms: E2(17)KB2; PUBC1; UBC4; UBC4/5; UBCH4; UBCH5B

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC218795 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTCTGAAGAGAATCCACAAGGAATTGAATGATCTGGCACGGGACCCTCCAGCACAGTGTTCAGCAG
GTCCTGTTGGAGATGATATGTTCCATTGGCAAGCTACAATAATGGGGCCAAATGACAGTCCCTATCAGGG
TGGAGTATTTTCTTGACAATTCATTTCCCAACAGATTACCCCTTCAAACCACCTAAGGTTGCATTTACA
ACAAGAATTTATCATCCAAAATATTAACAGTAATGGCAGCATTTGTCTTGATATTCTACGATCACAGTGGT
CTCCAGCACTAACTATTTCAAAAGTACTCTTGTCCATCTGTTCTCTGTTGTGATCCCAATCCAGATGA
TCCTTTAGTGCCTGAGATTGCTCGGATCTACAAAACAGATAGAGAAAAGTACAACAGAATAGCTCGGGAA

**TGGACTCAGAAGTATGCGATG** 

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC218795 protein sequence

Red=Cloning site Green=Tags(s)

MALKRIHKELNDLARDPPAQCSAGPVGDDMFHWQATIMGPNDSPYQGGVFFLTIHFPTDYPFKPPKVAFT TRIYHPNINSNGSICLDILRSQWSPALTISKVLLSICSLLCDPNPDDPLVPEIARIYKTDREKYNRIARE

WTQKYAM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6365\_e05.zip



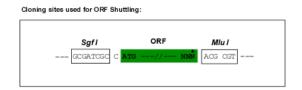
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

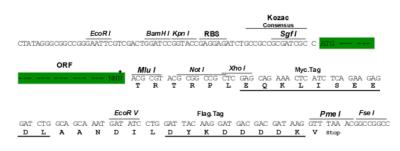
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com ORÏGENE

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_003339

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:** <u>NM 003339.3</u>

RefSeq Size: 2715 bp RefSeq ORF: 444 bp



**Locus ID:** 7322

UniProt ID: P62837

Cytogenetics: 5q31.2

Domains: UBCc

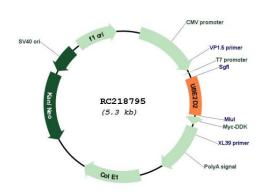
Protein Pathways: Ubiquitin mediated proteolysis

**MW:** 16.7 kDa

Gene Summary: Regulated degradation of misfolded, damaged or short-lived proteins in eukaryotes occurs via

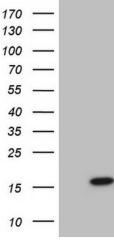
the ubiquitin (Ub)-proteasome system (UPS). An integral part of the UPS system is the ubiquitination of target proteins and covalent linkage of Ub-containing proteins to form polymeric chains, marking them as targets for 26S proteasome-mediated degradation. Ubiquitination of proteins is mediated by a cascade of enzymes which includes E1 (ubiquitin activating), E2 (ubiquitin conjugating), and E3 (ubiquitin ligases) enzymes. This gene encodes a member of the E2 enzyme family. Substrates of this enzyme include the tumor suppressor protein p53 and peroxisomal biogenesis factor 5 (PEX5). Alternative splicing results in multiple transcript variants of this gene. [provided by RefSeq, May 2013]

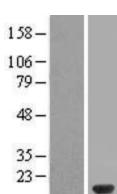
## **Product images:**

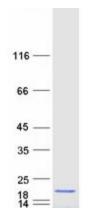


Circular map for RC218795









HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UBE2D2 (Cat# RC218795, 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-UBE2D2(Cat# [TA806600]). Positive lysates [LY418757] (100ug) and [LC418757] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY418757]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218795 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified UBE2D2 protein (Cat# [TP318795]). The protein was produced from HEK293T cells transfected with UBE2D2 cDNA clone (Cat# RC218795) using MegaTran 2.0 (Cat# [TT210002]).