

## Product datasheet for **RC205621**

### UBE2D1 (NM\_003338) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** UBE2D1 (NM\_003338) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** UBE2D1  
**Synonyms:** E2(17)KB1; SFT; UBC4/5; UBCH5; UBCH5A  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205621 representing NM\_003338  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGCGCTGAAGAGGATTCAGAAAGAATTGAGTGATCTACAGCGGATCCACCTGCTCACTGTTCAGCTG  
GACCTGTGGGAGATGACTTGTCCACTGGCAAGCCACTATTATGGGGCCTCTGATAGCGCATATCAAGG  
TGGAGTCTTCTTCTCACTGTACATTTCCGACAGATTATCCTTTAAACCACCAAGATTGCTTTCACA  
ACAAAAATTTACCATCCAACATAAACAGTAATGGAAGTATTTGTCTCGATATTCTGAGGTCACAATGGT  
CACCAGCTCTGACTGTATCAAAAGTTTTATTGTCCATATGTTCTCTACTTTGTGATCCTAATCCAGATGA  
CCCTTAGTACCAGATATTGCACAAATCTATAAATCAGACAAAGAAAAATACAACAGACATGCAAGAGAA  
TGGACTCAGAAATATGCAATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205621 representing NM\_003338  
Red=Cloning site Green=Tags(s)  
MALKRIQKELSDLQRDPPAHCSAGPVGDDLFWQATIMGPPDSAYQGGVFFLTVHFPTDYPFKPPKIAFT  
TKIYHPNINSNGSICLDILRSQWSPALTVSKVLLSICSLLCDPNPDDPLVPDIAQIYKSDKEKYNRHARE  
WTQKYAM

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

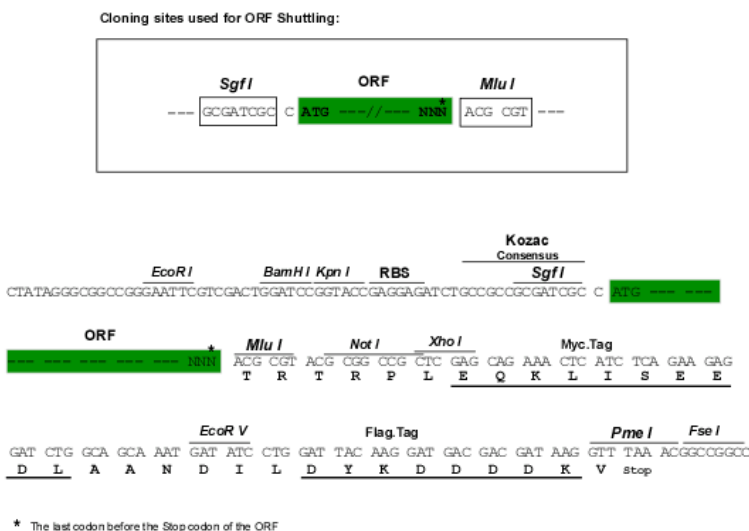
**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2875\\_a05.zip](https://cdn.origene.com/chromatograms/mg2875_a05.zip)



[View online »](#)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003338

**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:** [NM\\_003338.5](#)

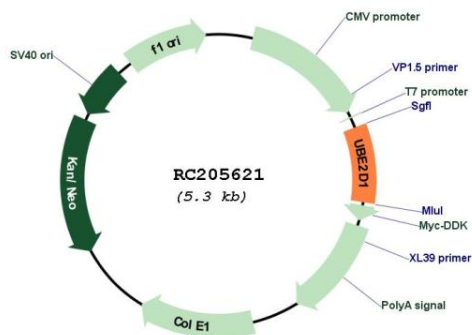
**RefSeq Size:** 2669 bp

**RefSeq ORF:** 444 bp

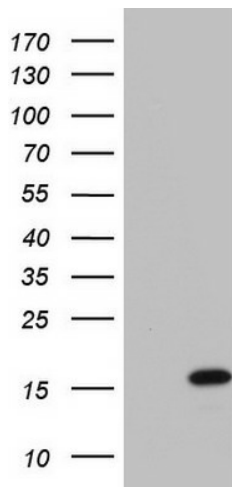
**Locus ID:** 7321  
**UniProt ID:** [P51668](#)  
**Cytogenetics:** 10q21.1  
**Domains:** UBCc  
**Protein Pathways:** Ubiquitin mediated proteolysis  
**MW:** 16.4 kDa

**Gene Summary:** The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This gene encodes a member of the E2 ubiquitin-conjugating enzyme family. This enzyme is closely related to a stimulator of iron transport (SFT), and is up-regulated in hereditary hemochromatosis. It also functions in the ubiquitination of the tumor-suppressor protein p53 and the hypoxia-inducible transcription factor HIF1alpha by interacting with the E1 ubiquitin-activating enzyme and the E3 ubiquitin-protein ligases. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]

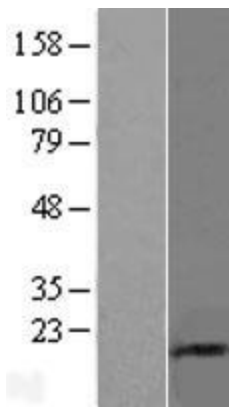
### Product images:



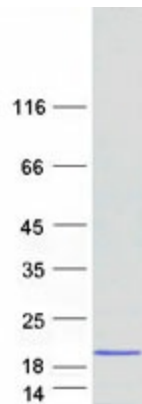
Circular map for RC205621



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UBE2D1 (Cat# RC205621, 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-UBE2D1 (Cat# [TA803633]). Positive lysates [LY418756] (100ug) and [LC418756] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418756]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205621 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UBE2D1 protein (Cat# [TP305621]). The protein was produced from HEK293T cells transfected with UBE2D1 cDNA clone (Cat# RC205621) using MegaTran 2.0 (Cat# [TT210002]).