

## Product datasheet for **RR210905**

### Otub1 (NM\_001106332) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Otub1 (NM_001106332) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Otub1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR210905 representing NM_001106332 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCGGAGGAACCTCAGCAGCAGAAGCAGGAGCCGCTGGGCAGCGATTCCGAAGGTGTTAACTGTC  
TAGCCTATGATGAAGCCATTATGGCTCAGCAAGACCGGATTACAGCAAGAGATTGCTGTGCAGAATCCTCT  
GGTGTGAGGCGACTGGAACCTCTCAGTTCTGTATAAGGAGTATGCTGAGGATGACAACATTTACCAACAG  
AAGATCAAGGACCTCCACAAAAAGTACTCCTACATACGGAAGACCAGGCCCGACGGGAAGTCTTCTATC  
GAGCGTTTGGCTTCTCCCACTTGGAGGCACTGCTCGATGACAGCAAGGAAGTGCAGCGGTTCAAAGCCCT  
GTCTGCCAAGAGTAAAGAGGACCTGGTGTCCAGGGCTTCACTGAATTCACAATCGAGGACTTCCACAAC  
ACATTCATGGACCTTATCGAGCAGGTGGAGAAGCAGACCTCAGTAGCTGACCTGTGGCCTCCTTCAACG  
ACCAGAGCACCTCAGACTACCTTGTGGTCTACCTGCGACTGCTCACCTCAGGCTACCTGCAGCGGGAGAG  
CAAGTTCTTCGAGCACTTCATAGAGGGTGGCCGGACTGTTAAGGAGTTCTGCCAGCAGGAGGTGGAACCC  
ATGTGCAAGGAGAGCGACCACATCCACATCATCGCCCTGGCCAGGCCCTCAGTGTGTCCATCCAGGTGG  
AGTACATGGACCGCGCGAGGGCGGCACCACCAATCCACACGTCTTCCCCGAGGGCTCTGAGCCCAAGGT  
CTACCTGCTTACCGACCTGGACACTACGATATCCTCTACAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR210905 representing NM\_001106332  
 Red=Cloning site Green=Tags(s)

MAAEEPQQKQEPLGSDSEGVNCLAYDEAIMAQQDRIQQEIAVQNPLVSRLELSVLKYEAEDDNIYQQ  
 KIKDLHKKYSYIRKTRPDGNCFYRAFGF SHLEALLDDSKELQRFKAVSAKSKEDLVSQGFTEFTIEDFHN  
 TFMDLIEQVEKQTSVADLLASFNDQSTSDYLVVYLRLLTSGYLQRESKFFEHFIEGGRTVKEFCQQEVEP  
 MCKESDHIHIIALAQAALSYSIQVEYMDRGEGGTTNPHVFPEGSEPKVYLLYRPGHYDILYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001106332

**ORF Size:** 813 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.

**RefSeq:** [NM\\_001106332.1](#), [NP\\_001099802.1](#)

**RefSeq Size:** 1687 bp

**RefSeq ORF:** 816 bp

**Locus ID:** 293705

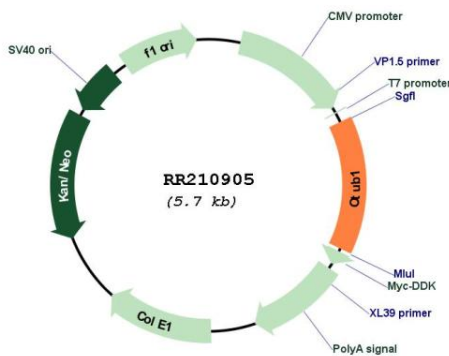
**UniProt ID:** [B2RYG6](#)

**Cytogenetics:** 1q43

**MW:** 31.3 kDa

**Gene Summary:** Hydrolase that can specifically remove compared to 'Lys-48'-linked conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. Acts via its interaction with RNF128/GRAIL. Surprisingly, it regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). Mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. Not able to cleave di-ubiquitin. Also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RR210905