

## Product datasheet for MR222438

### Otud4 (NM\_001081164) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Otud4 (NM_001081164) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Otud4
Synonyms:	4930431L18Rik; AI449692; D8Erttd69e; mKIAA1046
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222438 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

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CAAAATTTCCATTAGATACAGATTACAGAGGGCCAAAGAATCTAAACAAGCCAATCAAAGCCCCATCTG  
CACTACCTCCTCGACTCCAGCATCCTTCATCGGGTGAAGACAGCATGCATTCTCCAGTCATTCTACAGG  
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AGGAAGTCTTCACATGCAAGGGACAGGAAAGGAAGCATGCGGAGAGCAGACGCAGAGGAACGAAAGGACA  
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Protein Sequence:

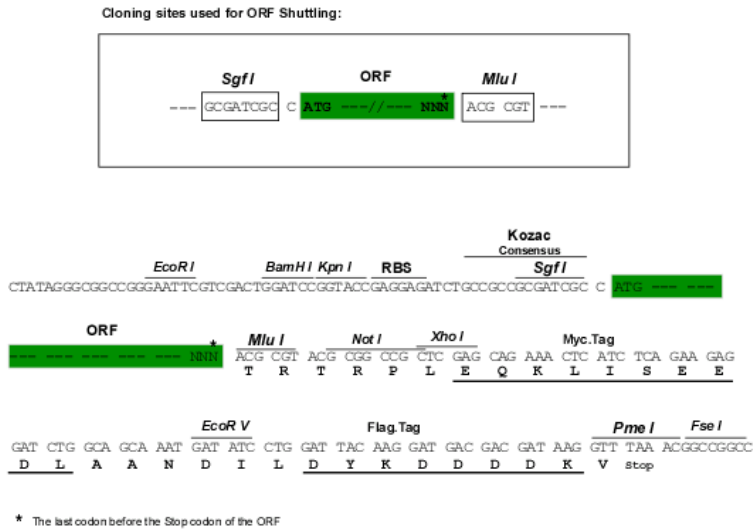
>MR222438 protein sequence  
 Red=Cloning site Green=Tags(s)

MEAAVGAPDGVDDQGGVPLEDETPMDAYLRKLGLYRKLVAKDGSCLFRAVAEQVLHSQSRHVEVRMACIR  
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 SKSTAATDVNGFKPSGSENPKNNGNSADLPLSRKVLKSLNPVYRNVEYEWLKSQAQQKRDYSIAAGL  
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 QNFHSDTDYRGPKNLNPPIKAPSALPPRLQHPSSGVRQHAFSSHSTGSQSQKSSSEHKNLSRMPQITRK  
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 RKSSHARDRKSMRRADAERKDKDSLGRHGHVVDKPEPSTLEISDDKCTRVSSPSKSKKECPSPEQK  
 AEHIPLSNPAPLLVSPEVHLTPAVPSLPATVPAWPSEPTTFGPTGVAQIPILSVTQTTGPDAAVSQAHL  
 TPSPVPVSIQAVNQPLMPLPQTMSLYQDPLYPGFPCSEKGDRAIAPPYSLCQTGEDLPKDKNILRFFNL  
 GVKAYSCPMWAPHSYLYPLHQA YMAACRMYPKVPVVPVYQNTWFQEAPPAQSESDCPTDAHYSLHPEAS  
 VNGQMPQAEMGPPAFASPLVIPPSQVSEHGQLSYQPELESENPGQLLHAEYEESSLGKNNYPQSFQPN  
 PFLGPVPIAPPFFPHVWYGYPFQGFVENPVMRQNIPLPPDDKGELDLPLENLDLSKECDSSVAVDEFDA  
 RVEGAHLSAASVSSKHEGRVEQSSQTRKADIDLASGSSAVEGKHPPTQILNREREPGEPEPKRTIQ  
 SLKEKPEKVKDPKTAADVSPGANSVDRLQRPKEESSEDENEVSNILRSGRSKQFYNQTYGSRKYKSDWG  
 SSGRGGYQHRGEEESWKGQPNRSRDEGYQYHRHVRGRPYRGDRRRSGMGDGHGQHT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001081164

ORF Size: 3324 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\\_001081164.1](#), [NP\\_001074633.1](#)

RefSeq Size: 7324 bp

RefSeq ORF: 3321 bp

Locus ID: 73945

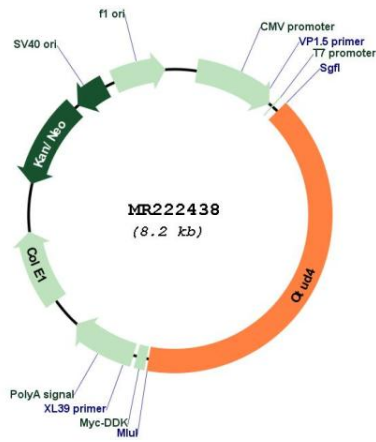
UniProt ID: [B2RRE7](#)

**Cytogenetics:** 8 37.74 cM

**MW:** 123.1 kDa

**Gene Summary:** Deubiquitinase which hydrolyzes the isopeptide bond between the ubiquitin C-terminus and the lysine epsilon-amino group of the target protein. May negatively regulate inflammatory and pathogen recognition signaling in innate immune response. Upon phosphorylation at Ser-202 and Ser-204 residues, via IL-1 receptor and Toll-like receptor signaling pathway, specifically deubiquitinates 'Lys-63'-polyubiquitinated MYD88 adapter protein triggering down-regulation of NF-kappa-B-dependent transcription of inflammatory mediators (PubMed:29395066). Independently of the catalytic activity, acts as a scaffold for alternative deubiquitinases to assemble specific deubiquitinase-substrate complexes. Associates with USP7 and USP9X deubiquitinases to stabilize alkylation repair enzyme ALKBH3, thereby promoting the repair of alkylated DNA lesions (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR222438