

Product datasheet for **MR231586**

Otud4 (NM_001256033) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Otud4 (NM_001256033) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Otud4
Synonyms: 4930431L18Rik; AI449692; D8Ert69e; mKIAA1046
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR231586 representing NM_001256033
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGGCAGCCGTCGGCGCGCCGACGGCGTGGACCAGGGCGGCGTGGGGCCGCTGGAGGATGAGACGC
 CCATGGACGCCTATCTGCGCAAACCTGGGCTTGTATCGGAAATGGTCGCCAAGGACGGGTCGTGCTTGT
 CCGGGCTGTGGCCGAGCAGGTGTTGCACCTCAGTCTCGGCATGTGGAGTTAGGATGGCCTGTATCCGC
 TACCTTCGAGAGAACAGAGAGAAATTTGAAGCGTTTATAGAAGGGTCATTTGAAGAATATTTAAACGTT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231586 representing NM_001256033
 Red=Cloning site Green=Tags(s)

MEAAVGPDPDGVQGGVPLEDETPMDAYLRKLGLYRKLVAKDGSLFRAVAEQVLHSQSRHVEVRMACIR
 YLRENREKFEAFIEGSFEEYLKRLNQPQEWVQVEISALSLMYRKDFVIYQEPNVSPSHVTENNPFKVL
 LCFNSNGHYDIVYPIITYKDSSAMCQSLLYELLYEKVFKTDVSKIMMLEASEVAEESNSEISDSEDDSC
 SKSTAATDVNGFKPSGSENPKNNGNSADLPLSRKVLKSLNPAVYRNVEYEIWLKSKQAQQKRDYSIAAGL
 QYEVGDKCHQVRLDHNGKLSNADIHGVHSENGLVLSEELGKKHTPKNLKPPPPESWNTVSGKMKKPN
 QNFHSDTDYRGPKNLNPVIKAPSALPPRLQHPSSGVRQHAFSSHSTGSQSQKSSSEHKNLSRMP
 PDRERAEDFDHVSRESYFGLSPEERREKQAIIEESRLLYEIQNRDEQAFPALSSSSVSQSPS
 QNSNACVPRKSSHARDRKGSMRRADAERKDKDSLGRHGVHDKKPEPSTLEISDDKCTRVSSPSK
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 AQPILSVTQTTGPDAAVSQAHLTPSPVPVSIQAVNQPLMPLPQTMSLYQDPLYPGFPCSEKGDRAI
 APPYSLCQTGEDLPKDKNILRFFFNLVGKAYSCPMWAPHSYLYPLHQAYMAACRMYPKVPV
 PVYPQNTWFQEAPPAQSESDCPCDHAHYSLHPEASVNGQMPQAEEMGPPAFASPLVIPP
 SQVSEGHGQLSYQPELESENPGQLLHAEYEEESLSGKNMYPQQSFQPNPFLGPVPIAPP
 FPHVWYGYPFQGFVENPVMRQIVLPPDDKGELDLPLENLDLSKECDSVSAVDEFPDAR
 VEGAHSLSAASVSSKHEGRVEQSSQTRKADIDLASGSSAVEGKGHPPTQILNREREPGSAE
 PPKRTIQSLKEKPEKVKDPKTAADVVSPGANSVDRLQRPKESESENEVSNILRSGRSKQFY
 NQTYGSRKYKSDWGS SGRGGYQHVRGEESWKQPNSRDEGYQYHRHVRGRPYRGDRRRSGM
 GDGHRGQHT

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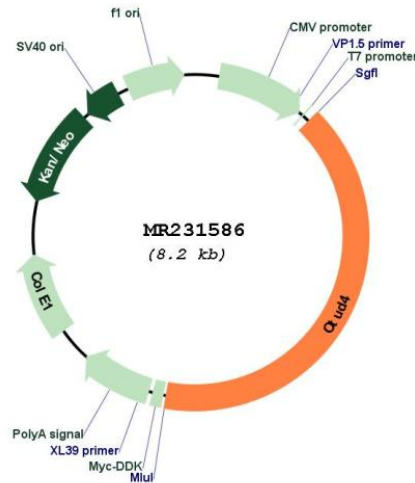
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001256033

ORF Size: 3321 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:	<ol style="list-style-type: none">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:	<u>NM_001256033.1, NP_001242962.1</u>
RefSeq Size:	7327 bp
RefSeq ORF:	3324 bp
Locus ID:	73945
UniProt ID:	<u>B2RRE7</u>
Cytogenetics:	8 37.74 cM
MW:	123.5 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]