

## Product datasheet for MR231571

### Usp8 (NM\_001252580) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Usp8 (NM\_001252580) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Usp8  
**Synonyms:** AI574262; AW557536; mKIAA0055; Ubpy  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR231571 representing NM\_001252580  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCTGCTGTAGCTTCAGTTCCTAAAGAACTCTACCTCAGTTCCTCACTAAAAGACCTCAATAAGAAGA  
CCGAAGTTAAACCTGAGAAAACCAGCACCAAGAATACCAAGTTTTGTAATTCCTTCGTTTCTAAGTTA  
TATACACAGCGCGCAGAAGATCTCAAGACAGCAGAAGAATGCAGACTAGATCGTGATGAGGAAAGGGCC  
TATGTGCTTTATATGAAATATGTGGCAGTTTATAATCTTATCAAAAAGAGACCTGATTTCAAGCAACAGC  
AGGATTATTATCTTTCAATACTTGGACCTGCAACATCAAAAAGCTATTGAAGAAGCTGAAAGACTCTC  
CGAAAAGCCTTAACTAAGATACGAAGAGGCTGAAGTTCGGAAACAACCTTGAAGAAAAGGACAGACGGGAG  
GAAGAGCAGCTGCAGCAACAGAAAAGGCAGGAGATGGGGAGAGAGGACAGCGGTGCGGCAGCCAAACGCT  
CTGTGGAAAATTTACTGGATTCCAAAACCAAACCCAAAGGATTAACGGCGAGAAGAGTGAAGGAGCTGC  
AGCTGCAGAGAGAGGAGCCATCACAGCAAAGGAATATACGATGATGATGGATAAAAACACAAGCTTA  
ATTATAATGGATGCTCGAAAAATACAGGATTATCAGCATTCTGTATCTTGGATTCTCAGTGTTCCTG  
AAGAAGCTATCAGTCCAGGAGTCACTGCTAGTTGGATTGAAGCAAACCTCAGATGATTCTAAAGACAC  
ATGGAAAAGAGGGGAGTGTGGACTATGTGGTCTTCTCGACTGGTTTAGTTTCAGCGAAAAGATTTGCTG  
CTTGGGACCCTCTACGGAGTCTGAAAGATGCACTTTTCAAGTGGAAAAGTAAAAGTGTCTGCGCCATG  
AGCCTTTGGTGTGGAGGGCGGCTATGAAAAGTGGCTGCTTTGCTACCCGAGTTTACAACCAATGCTAA  
GGTCACTCCACCCCTCGGAGCAGAGCTGAAGAGGTGTCTGTCTCATTGGATTTTACTTATCCCTCATTG  
GAAGAACCAGTTCCTTCCAACTTCTACCCAGATGCCACCTCCTCTATAGAAACAAATGAAAAGGCAC  
TGTTGGTAACTGATCAAGATGAAAAGCTGAGACTGTCAACCCAGCCAGCTCTAGCTGGACCTGGTGGCC  
TCCAGAGCTGAAGCCTCACCCATAATTCAGCCAGCGCCTGCTACAAAGAGTGTCCACAGGTTGATCGT  
ACGAAAAAACCGTCAGTCAAGTTGCCTGAAGATCATAGAATAAAATCTGAAAATACAGATCAGAGTGGAA  
GAGTTCTTCTGATCGATCCACCAAGCCAGTATTTCCCTCTCAACCACCATGTTAACAGATGAAGAAAA  
GGCTCGTATTCATCAAGAACTGCCTTCTTATGGAAGAATAAACAGGAGAAGGAACTTTGGGACAAG  
CAGCAGAAGGAACAGAAAAGAGAAGCTGAGAAGGGAGGAACAAGAGCGCAAAGCTGGAAGACACAGGATG



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CAGATGAACGTGACTCCACTGAGAATCAGCACAAAGCAAAGGATGGACAAGAGAAAAAGACAGCAAACA  
 GACCAAGACGGAAGACAGAGAGCTTTCAGCAGACGGGGCCAGGAAGCCACAGGAACACAAAGACAAAGT  
 AAGAGTGAGCATGAAGCTTCTGATGCTAAGGTACCTGTGGAAGGTAAAAGGTGTCCCACGTGAGGGCGC  
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 CAAGCAGCTCAACGAGTCCATCATCGTGGCCCTGTTCCAGGGCCAGTTCAAGTCCACAGTGCAGTGCCCTC  
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 TTAGTGACCTGAAACGATTTTCTATGACGGCAGGTGGAAGCAGAAGCTGCAAACATCCGTGGATTTCC  
 CATTGGAAAATCTTGACCTGTACAGTACGTTATTGGTCCAAAAACAGCTTGAAGAAAATAAATTGTT  
 TTCTGTTTCAAACCACTACGGCGGGCTAGACGGAGGCCACTACACAGCCTACTGTAAGAACGGCGCAAGG  
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 CTTATATCTCTTTTATACTTCCCTGGGACCACGCATAACTGATGTAGCCACA

ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR231571 representing NM\_001252580

Red=Cloning site Green=Tags(s)

MPAVASVPKELYLSSSLKDLNKKTEVKPEKTSTKNTKFKCFSSFLSYIHSAQKIFKTAEECRDRDEERA  
 YVLYMXYVAVYNLIKRPDFKQQDYLSILGPANIKKAIIEEAERLSESLKLRYEAEVRKQLEEKDRRE  
 EEQLQQKQKQEMGREDSGAAAKRSVENLLDSKTKTQRINGEKSEGAAGAERGAITAKELYTMMMDKNTSL  
 IIMDARKIQDYQHSCILDSLVPPEAISPVGVTASWIEANLSDSKDTWKKRGSVDYVLLDFWSSAKDLL  
 LGTTLRSLKDALFKWESKTVLRHEPLVLEGGYENWLLCYPQFTTNAKVTPPPRSRAEEVSVSLDFTYPSL  
 EEPVPSKLPQMPPIETNEKALLVTDQDEKLRLSTQPALAGPGAAPRAEASPIIQPAPATKSVQVDR  
 TKKPSVKLPEDHRIKSENTDQSGRVLSDRSTKPVFSPPTMLTDEEKARIHQETALLMEKNKQEKELWDK  
 QQKEQKEKLRREEQERKAGKTQDADERDSTENQHKAKDQEKKDSKQTKTEDREL SADGAQEATGTQRQS  
 KSEHEASDAKVPVEGKRCPTSEAQKRPADVSPASVSGELNAGKAQREPLTRARSEMGRIVPGLPLGWAK  
 FLDPITGTFRYYHSPNTVHMYPPMAPSSAPPSTPPTHKVKPQVPAERDREPSKLRKSYSSPDITQALQ  
 EEEKRRP AVTPMVNRENKPPCYPKAEISRLSASQIRNLNPVFGGSGPALTGLRNLGNTCYMNSILQCLCN  
 APHLADYFNRCYQDDINRSNLLGHKGEVAEEFGIIMKALWTGQYRYISPKDFKVTIGKINDQFAGSSQQ  
 DSQELLFLMDGLHEDLNKADNRKRHEENNEHLDDLQAAEHAWQKHKQLNESIIIVALFQGGFKSTVQCL  
 TCRRRSRTFEAFMYLSLPLASTSKCTLQDCLRLF SKEEKLTDNNRFYCSHCRARRDSLKIEIWKLPVVL  
 LVHLKRF SYDGRWKQLQTSVDFPLENLDLSQYVIGPKNSLKKYNLF SVSNHYGGLDGGHYTAYCKNAAR  
 QRWFKFDDHEVSDISVSSVRSSAAYILFYTSLGPRITDVAT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

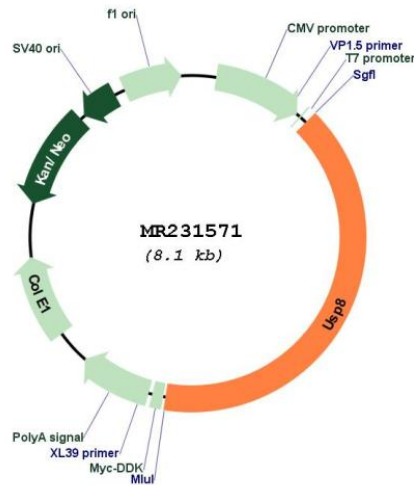
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001252580

ORF Size: 3273 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001252580.1, NP_001239509.1</u>
<b>RefSeq Size:</b>	4210 bp
<b>RefSeq ORF:</b>	3276 bp
<b>Locus ID:</b>	84092
<b>Cytogenetics:</b>	2 F1
<b>MW:</b>	124.3 kDa
<b>Gene Summary:</b>	<p>Hydrolase that can remove conjugated ubiquitin from proteins and therefore plays an important regulatory role at the level of protein turnover by preventing degradation. Converts both 'Lys-48' and 'Lys-63'-linked ubiquitin chains. Catalytic activity is enhanced in the M phase. Involved in cell proliferation. Required to enter into S phase in response to serum stimulation. May regulate T-cell anergy mediated by RNF128 via the formation of a complex containing RNF128 and OTUB1. Probably regulates the stability of STAM2 and RASGRF1. Regulates endosomal ubiquitin dynamics, cargo sorting, membrane traffic at early endosomes, and maintenance of ESCRT-0 stability. The level of protein ubiquitination on endosomes is essential for maintaining the morphology of the organelle. Deubiquitinates EPS15 and controls tyrosine kinase stability. Removes conjugated ubiquitin from EGFR thus regulating EGFR degradation and downstream MAPK signaling. Involved in acrosome biogenesis through interaction with the spermatid ESCRT-0 complex and microtubules. Deubiquitinates BIRC6/bruce and KIF23/MKLP1 (By similarity). Deubiquitinates BACE1 which inhibits BACE1 lysosomal degradation and modulates BACE-mediated APP cleavage and amyloid-beta formation (By similarity).[UniProtKB/Swiss-Prot Function]</p>