

## Product datasheet for MC223559

### Usp36 (NM\_001033528) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Usp36 (NM\_001033528) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Usp36  
**Synonyms:** 2700002L06Rik; mKIAA1453  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC223559 representing NM\_001033528  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTATAGTCGATAAGCTGAAGGAGGCTCTCAAGCCTGGCCGCAAGGACTCGGCCGAGGATGGGGACC  
TGGGCAGGCTGCTGGCAGCCTCTGCCAAGAAGGTGCTTCTGCAGAGGATTGAGTTTGAGCCGGCCAGCAA  
GAGCTTCTCTACCAGCTGGAGTCTTGAAGAGCAAATACGTACTGTTGAGCGCCAGGGCTGAGGGAGCC  
AGTCGCCACAGGAGCGGAGATGAACTCCAGGCCAGGAAACCAGGCACCGAGCGTGTGTCTGGAAGTGGAG  
GCGACGGAGTCCCTGCCCGCAGAAAGTCTCTCCCTGTGGAGCGTCTGTCCCTGAGGTGGAAACGTGT  
TTTCCGAGTTGGCGCAGGGCTGCACAACCTGGGTAACACCTGCTTCTCAACTCCACCATCCAGTCTTG  
ACCTACACACCACCTCTGGCCAACTACTTGTCTCCAAGGAGCACGCACGGAGCTGTCACCAAGGGGCT  
TCTGCATGCTGTGTCTCATGCAAAACCACATGGTCCAGGCCTTTGCCAACAGCGGCAATGCTATCAAGCC  
CGTCTCCTTCATCAGAGACCTGAAAAAGATTGCCCGGCACTTCCGGTTCGGGAACCAAGAGGATGCACAC  
GAATTCCTGCGGTACACCATTGATGCGATGCAGAAGGCCTGCTTGAATGGCTACGCTAAGTTGGATCGGC  
AGACACAGGCTACTACCCTGGTGCATCAGATCTTGGAGGCTATCTCAGGTCCCAGTGAAGTGTCTGT  
GTGCAAGAGTGTCTCAGACACATACGATCCCTACTTGGACATAGCACTGGAGATCCGGCAAGCTGCAAAAT  
ATTGTGCGCGCTCTGGAACCTTTTGTGAAGTCAAGTGTCTGAGTGGAGAGAACGCCATATGTGTGCTA  
AGTGTAAGAAGAAGGTTCCAGCCAGCAAGCGCTTCAACATCCATAGAACATCCAATGTCCTGACTCTGTC  
CCTCAAGCGCTTCGCCAACTTTAGTGGGGGAAGATCACCAAGGATGTTGGCTATCCAGAGTTCTGAAAC  
ATCCGTCATACATGTCGCAGAGCAGCGGTGATCCTGTGCATGTATGGGCTCTATGCTGTCTGCTGCACT  
CAGGCTACAGCTGTCACGCTGGCACTACTACTGCTATGTGAAGGCCAGCAATGGACAGTGGTACCAGAT  
GAACGACTCCTTGGTCCATTCCAGCAATGTCAAGGTGGTCTGAACCAGCAGGCCACTGCTCTTCTAT  
CTGCGGATTCAGGCTCTAAGAAAAGTCTGAGGGCCCTGTCTCCAGAGTGGGCGCCACTCTCCCTAGCC  
GTCCCAAAGTTGTTCCAGAGCACTCCAAGAAGAGCCCTGGCAATGGGGTTGTTCCCTCCCGCTGATGGC  
AAAGCGACAAGACTCTGTAATGATGAGAAAGCTCCAGCCCTGAGGAGGTTGGCGTACCTGTGTCCAGA  
AATGGCTCCCTTCTGGCCTGAAGTTACAGAACGGATGTGCTCCTGCCAAGACACCTGCCGGTCCCGT



CCCCAAGACTCACGCCACGCCACTCATATGCCACCATTCTGGATGAGCCCGAAAGAAGGTGAAGAA  
GTCAGCCCCACTGCAGTCTCTACCACATCTCAAACCATTCTCAGGGCTCTCTGGGACCGGCGAGTCC  
CGGAGCCAGCGGCCCGGCTCCTGGGCAAGCAGAGACACCATCTTCTCTACCTCCCCGAAGCTCCTGGCCA  
GAGCCATTACTAACGGGCACAGGCTGAAGGGCGAAGGCAGTGGTGTGGACCTGGAGAAGGGGGATTCAAG  
CAGCTCCAGCCCCGAGCACTCTGCCAGCAGTGACCCTGCCAAGGCCCGCAGACCCGAGAGAGCAGAGCT  
GCGCATGCCTGTGATTCTCAGGGAACAACTGTCCCACCGCTGGCCATCCCAAAGCGCTGTTGAATGGAG  
TAGATGCCAAGATGGTGAAGTTGAAGTCCCCGGCCCTGAGCAGCACCACAACCGCCACAAGCCTCAT  
GTCTCCTCACCAGCCAAAAAACTGGCCCTGTACGCCAAGAAGGCCAGCACCCCTGCGGAGGGCGACCGGC  
AATGACATCGGTTACCTTCCCCCTCAGCATTCTGCGACCTCACCTCCCCATGAAAGCCACCCACCCCG  
TCGTTGCCTCCACTGGGCTGTGAGTAAGACCAGGACTGCTGCACCTGCCCCCGACCGTCCACCCACCC  
CCACTCTGCATCTGTCCAGTAGTAGTCCAAGCCCTTAGGGACATCAGAGCCACAGAGCTGCCGCCCC  
TCTGCCTGGACACCCCTGCCTCAGGTCAATGGACACTTACGTCCTTACACCAACTGCCAGAGGCCA  
GCGAGGCCCTACACAGCCCTCCAAAAAGAGGAAAAAGACCCCTAATGGAGATCCCAGAGACTGGGCAT  
CGACACGCTCTCCACAGTGCCTCAGGGGAGCACCTGCAGCAGCACGCAGGAAGAGAAAGAAGAGGTGC  
TCGGAGGGTGAGGGTGCCACAGTCCCAAGCAGGAAGGCCAATTCAGGACCAGTCTTGGAGTCCGGGA  
GCCAGAAGGAAGAGGGTACGCAGCCCCAGGTAATGGCCATCAAGTGAGTACATTCTGGACAGTTACCA  
TGTGAGCAGCAGGAAAAGGAGGAAGAGGAAAAGATCGGAAGGACTCAGCCAGGAAGCCACCCCGTCGCAG  
GACCTAATTCAGCACAGCTGCTCCCCTGTAGACCACAGTGAGCCTGAGGCCAGGACAGAGTTGCAGAAGA  
AGAAGAAGAAGAAAAGGAAAAGAAAGCCCGAGCCACAGCAGGATGAAGAGAGCAAGCACCCAGGAGA  
CCAGAGGAGCCCAAGGCCAGTGTACCCAGTCCCTGCGTTGAGTGTGAATGGCCATCTTCTAGTGAC  
TGCTTGGGGTGGGACAAGCACCTCTCGTTACCTGGAACAGAGATCAGGAACCCGATGTGGTCCAGGCGT  
TGCTTCAGGACTCATCTGATAAGGCTTATGGGAAAAAGTTTTGACCTGGGATGGCGAGCCTTCAGCCAT  
CAGTCAGGACGCCATCAAAGACAGCAGACTAGCCCGGACCCAGACCGTGGTTGACGACTGGGATGAAGAG  
TTTGATCGAGGGAAGGAAAAGAAAATTAAGAAAGTTCAAGAGAGAAAAGAAGAGAAACTTCAATGCCTTCC  
AGAAGCTTCAGAGTAGGGCAACTTTTGGTCTGTGACGCATCCTGCTAAGGTGGCCAGCCTCAGCTATCG  
CCGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	SgfI-MluI
<b>ACCN:</b>	NM_001033528
<b>Insert Size:</b>	3297 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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><a href="#">NM_001033528.1</a></u> , <u><a href="#">NP_001028700.1</a></u>

RefSeq Size: 5609 bp

RefSeq ORF: 3297 bp

Locus ID: 72344

UniProt ID: [B1AQJ2](#)

Cytogenetics: 11 E2

**Gene Summary:** Deubiquitinase essential for the regulation of nucleolar structure and function. Required for cell and organism viability. Plays an important role in ribosomal RNA processing and protein synthesis, which is mediated, at least in part, through deubiquitination of DHX33, NPM1 and FBL, regulating their protein stability (PubMed:29273634). Function as a transcriptional repressor by deubiquitinating histone H2B at the promoters of genes critical for cellular differentiation, such as CDKN1A, thereby preventing histone H3 'Lys-4' trimethylation (H3K4). Specifically deubiquitinates MYC in the nucleolus, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with isoform 3 of FBXW7 (FBW7gamma) in the nucleolus and counteracting ubiquitination of MYC by the SCF(FBW7) complex. In contrast, it does not interact with isoform 1 of FBXW7 (FBW7alpha) in the nucleoplasm. Interacts to and regulates the actions of E3 ubiquitin-protein ligase NEDD4L over substrates such as NTRK1, KCNQ2 and KCNQ3, affecting their expression and functions. Deubiquitinates SOD2, regulates SOD2 protein stability. Deubiquitinase activity is required to control selective autophagy activation by ubiquitinated proteins (By similarity).[UniProtKB/Swiss-Prot Function]