

## Product datasheet for **MR222450**

### Usp44 (NM\_183199) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Usp44 (NM_183199) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Usp44
Synonyms:	E430004F17Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR222450 representing NM\_183199  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATAGGTGCAAGCACGTTGAGCAGTTGAGCAGTTGCTCAAGGCCATTCCATCTTGGACCCTCAGAAAT  
 GGTACTGTATGGTCTGCAACACAACCGAGTCCATTTGGGCTTGCCTCAGCTGTTCCACGTCGCCTGTGG  
 GAAGTACATCCAAGAGCACGCACTGAAGCACTTCAAGAAAGCAGCCATCCCCTTGCCTTCGAGGTGAAC  
 GACATGTACGCTTTTGTATCTTTGTAACGATTATGTTCTAAACGATAACGCAGCCGGAGACCTGAAGT  
 CACTACGGAGTACACTAAGTACAATCAAAAGTAAAAAGTACCCCTGTGTGGTTCCGAGTGACTCGGTTTT  
 ACATCCTGTGGATGCACAGGACCGTGTACTCTTACTCGACGGCACCAATCTCTGCCGGAACGAG  
 GATCCAACGTGCGCCGCCCTCTGGCACAGGAGACGGGTGCTCATGGGAAAGCCTTTCGAACTTGGTTTCG  
 AACAGTCAGCAATTGGAAGGAAAGGGCAAGAGCCAACCTCAGGAGAGAATGGTAGCAAAACGAGAGCGGAA  
 GAGAAGGCAGCAGCAGGAGTTGGAGCAGCAGATGAAAGCCGAGCTGGAAAGCACACCTCCGCGGAAGAGT  
 TTACGCTTACAAGGCTCCTCGGAGGAGCGGCCACAATCGAAATCGTGCCAGTGCCGGCACCGCCCCAC  
 CTCCCGCATCCCAGCAAAGGACAAAGCCGCGCTACCTACTTCGGAAGACAGGACTTTTAAAAAACTTGA  
 CCTGAACCACTGGCTGGCTGTGGCTGCCAGCGATAAGGCCGATCCTATAAGCACTCAGCCGTACGGAG  
 GCGGCGGCACAGCAGATGAACGAAGGGCAAGAGAAAGAGAAAGGCTTCGTATGCTCCAGACATTCGGGTT  
 TATCCTCAGGCCGTGAGCGGAGGGGCTCAAAGGTCGGAACATGGAGCTTATTCAGCCAAGGAGGCCAG  
 TTCCCCGTACAGTTCTCTGCCATGAATTGCATATCCTGTTCCAAGTCATGTGGTCTGGAGAGTGGGCC  
 TTGGTCTCACCGTTTCCATGCTTCACTCCGTGGAGGCTGATCCCTGCTTTCGCGGTTACGCCCAGC  
 AGGATGCTCAGGAATTTCTTGTGAACCTCTGGATAAGATAACGTAAGTGAAGTGAAGTGAAGTGAAGTGAAGT  
 GTTACCAGCCCTCATCCCCTTCCCAAAGGAGACTTATTGAGCAAGTCTGAATGTGGTGAATAACATT  
 TTTACGGAATAATTTCTAGTCAGGTATGGATGCTTGCACATTTTTATCATCTTCGGCAATTCCTACA  
 GTGCGGCCTACAAGTGGTATTCTGTATGGATCGAGCGTGGGAAAGTTGGTGGCATTCTCGGTCAGAAAT  
 AGATTTCTTTCAGGAGTGTGAAGAAGTACGGATCTCTGAATCATTGGAAATAGTTTTGTATTGTGG  
 AAGCAGTGGCTTATGGGGAGAGAGTAAGGAGAAGTGCATCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR222450 representing NM\_183199  
 Red=Cloning site Green=Tags(s)

MDRCKHVEQLQLAQHSILDPOKWCYMCVNTTESIWACLSCSHVACGKYIQEHALKHFQESSHPVAFEVN  
 DMYAFCYLCNDYVLDNNAAGDLKSLRSTLSTIKSKKYPVPSVSLHPVDAQDRVYSLLDGTQSLPGNE  
 DPTCAALWHRRRVLMGAFRTWFEQSAIGRKGQEPQERMVAKREAKRRQQELEEQQMAELESTPPRKS  
 LRLQGSSEEAATIEIVPVRAPPPPPASPAKDKAALPTSEDRTFKKLDLNQWLAVAASDKARSYKHSVTE  
 AAAQQMNEGQEKGFVCSRHGLSSGLSGGASKGRNMEIQPREPSSPYSSLCHELHILFQVMWSGEWA  
 LVSPFAMLHVSVRLIPAFRGYAQQDAQEFLCELLDKIQRELETTGKLPAL IPTSQRRLEQVLNVVNNI  
 FHGQFLSQVWMSCHIFIIIFGNSYSAAYNWVFCMDRAWESWWHFSVRIDFFHECVKKSRISESLEIVLYLW  
 KQWLYGGESKENCIF

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9036\\_d11.zip](https://cdn.origene.com/chromatograms/mm9036_d11.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_183199

**ORF Size:** 1515 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\\_183199.3](#), [NP\\_899022.2](#)

**RefSeq Size:** 2946 bp

**RefSeq ORF:** 1518 bp

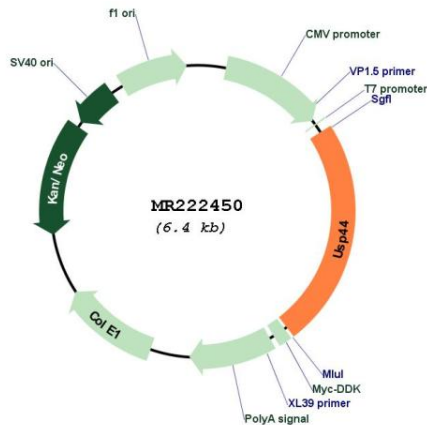
**Locus ID:** 327799

**Cytogenetics:** 10 C2

**MW:** 58 kDa

**Gene Summary:**

Deubiquitinase that plays a key regulatory role in the spindle assembly checkpoint or mitotic checkpoint by preventing premature anaphase onset. Acts by specifically mediating deubiquitination of CDC20, a negative regulator of the anaphase promoting complex/cyclosome (APC/C). Deubiquitination of CDC20 leads to stabilize the MAD2L1-CDC20-APC/C ternary complex (also named mitotic checkpoint complex), thereby preventing premature activation of the APC/C. Promotes association of MAD2L1 with CDC20 and reinforces the spindle assembly checkpoint. Acts as a negative regulator of histone H2B (H2BK120ub1) ubiquitination.[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for MR222450