

Product datasheet for **MR230956**

Usp44 (NM_001206851) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp44 (NM_001206851) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Usp44
Synonyms:	E430004F17Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230956 representing NM_001206851
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGATAGGTGCAAGCACGTTGAGCAGTTGAGCAGTTGCTCAAGGCCATTCCATCTTGGACCTCAGAAAT
 GGTACTGTATGGTCTGCAACACAACCGAGTCCATTTGGGCTTGCCTCAGCTGTTCCACGTCGCCTGTGG
 GAAGTACATCCAAGAGCACGCACTGAAGCACTTCAAGAAAGCAGCCATCCCCTTGCCTTCGAGGTGAAC
 GACATGTACGCTTTTTGTATCTTTGTAACGATTATGTTCTAAACGATAACGCAGCCGGAGACCTGAAGT
 CACTACGGAGTACACTAAGTACAATCAAAAGTAAAAAGTACCCCTGTGTGGTTCCGAGTGACTCGGTTTT
 ACATCCTGTGGATGCACAGGACCGTGTACTCCTTACTCGACGGCACCAATCTCTGCCGGAACGAG
 GATCCAACGTGCGCCGCCCTCTGGCACAGGAGACGGGTGCTCATGGGAAAGCCTTCGAACTTGGTTTCG
 AACAGTCAGCAATTGGAAGGAAAGGGCAAGAGCCAACCTCAGGAGAGAATGGTAGCAAAACGAGAGGGCAA
 GAGAAGGCAGCAGCAGGAGTTGGAGCAGCAGATGAAAGCCGAGCTGGAAGCACACCTCCGCGGAAGAGT
 TTACGCTTACAAGGCTCCTCGGAGGAGCGGCCACAATCGAAATCGTGCCAGTGCCGGCACCGCCCCAC
 CTCCCGCATCCCCAGCAAAGGACAAAGCCGCGCTACCTACTTCGGAAGACAGGACTTTTTAAAAAAGTAA
 TGACTCCTTAATCAAACGAAGGCCCATGGTAACTCCTGGTGAACCGGACTGAGAAAATTAGGAAATACT
 TGCTATATGAATTCTGTTCTTCAAGTGTGAGTCACTTACTCATTTTTCGACAATGTTTTTAAAGCTTG
 ACCTGAACCAGTGGCTGGCTGTGGCTGCCAGCGATAAGGCCCGATCCTATAAGCACTCAGCCGTACGGA
 GGCGGGCACAGCAGATGAACGAAGGGCAAGAGAAAGAGAAAGGCTTCGTATGCTCCAGACATTCGGGT
 TTATCCTCAGGCCGTGAGCGGAGGGCCCTCAAAGGTGCGAACATGGAGCTTATTCAGCCAAGGGAGCCCA
 GTTCCCCTACAGTTCTCTCTGCCATGAATTGCATATCCTGTTCCAAGTCAATGGTCTCGGAGATGGGG
 CTTGGTCTCACCGTTTGCCATGCTTCACTCCGTGTGGAGGCTGATCCCTGCTTTCCGCGGTTACGCCCAG
 CAGGATGCTCAGGAATTTCTTTGTGAACTTCTGGATAAGATACAACGTGAAGTACAGACAACCGGAACCA
 AGTTACCAGCCCTCATCCCCTTCCCAAAGGAGACTTATTGAGCAAGTCTGAATGTGGTGAATAACAT
 TTTTCACGGACAATTTCTTAGTCAGGTTACATGTCTTGTGACAACAAATCAGATACCATAGAATCC
 TTCTGGGACTTGTCCCTGGAGTTTCCAGAGAGATACCAGTGCAGTGGGAAAGATGCTGCCTCCAGCCGT
 GCCTGGTACTGACATGTTGGACAAATTTACAGAAACAGAAGCTTTAGAAGGGAAAATCTACATGTGTGA
 CCATTGAACTCAAAGCGTAGAAAGTTTTCGTCAAATCAGTTGTATTACAGAAGCCCAGAAGCAGCTT
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 GAGAGAAGATTGGTGTTCATGTTGCTTTGAGGAAACCTTAAACATGGAGCCTTATTGCTGCAGGGAGAC
 CCTGAACGCTCTCAGACCAGAGTGCTTTCTCTATAATTTATCTGCTGTCGTAATTCACCATGGAAAAGGA
 TTTGGCTCAGGACACTACACTGCCTACTGCTACAATTCGGAAGGAGGGTTCTGGGTTCCACTGCAACGATT
 CCAAGCTGAGCATGTGCACGATGGAAGAAGTACGCAAGGCCCAAGCTTATATCTTATTTTACTCAGCG
 AGTTACTGAGAATGGACATTCGAACTCTTGCCTCCCGAGCTCCTGTCCAATAGCCAGCACCCAGTAAG
 GAGACTGATGCCTCTTCTAATGAAGTCCTTAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230956 representing NM_001206851
 Red=Cloning site Green=Tags(s)

MDRCKHVEQLQLAQGHSILDPOKWYCMVCNTTESIWACLSCSHVACGKYIQEHALKHFQESSHPVAFEVN
 DMYAFCYLNDYVLNDNAAGDLKSLRSTLSTIKSKKYPVPSVSDSVLHPVDAQDRVYSLDGTQSLPGNE
 DPTCAALWHRRRVLGMKAFRTWFEQSAIGRKGQEPQERMVAKREARRQEQELEEQMKALESTPPRKS
 LRLQGSSEEAATIEIVPVRAPPPPPASPAKDKAALPTSEDRTFKKVSDSL IKRRPMVTPGVTGLRNLGNT
 CYMNSVLQVLSHLLIFRQCFKLKLDLNLQWLAVAASDKARSYKHSVTEAAAQMMNEGQEKEKGFVCSRHS
 LSSGLSGGASKGRNMELIQPREPSSPYSSLCHLHILFQVMWSEWALVSPFAMLHSVWRLIPAFRG YAQ
 QDAQEFLCELLDKIQRELETTGKLPAL IPTSQRRLEQVLNVVNNIFHGQFLS QVTCLACDNKSDTIES
 FWDLSLEFPERYQCSGKDAASQPCLVTDMLDKFTETEAL EGKIYMCDCNSKRRKFSSKSVVFTEAQKQL
 MICHLPQVLRHLKFRFRWGRNNREKIGVHVVFEEETLNMEPYCCRETLNLRPECFLYNLSAVVIHHGKG
 FGSGHYTAYCYNSEGGFVHCNDSKLSMCTMEEVRKAQAYILFYTQRVTENGH SKLLPPELLSNSQHPSPK
 ETDASSNEVLS

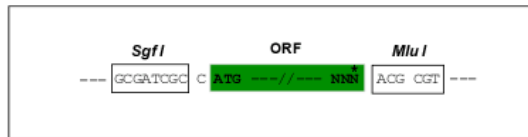
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

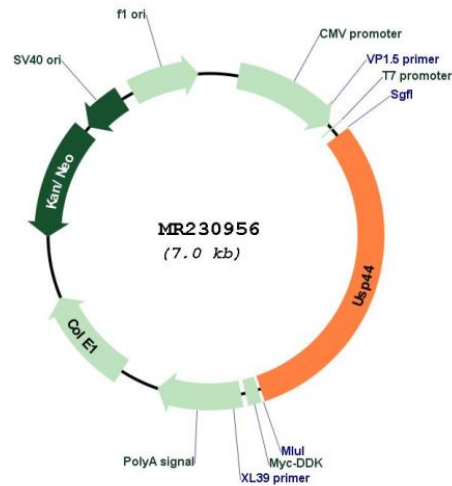
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001206851

ORF Size: 2133 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_001206851.3](#)

RefSeq Size: 2533 bp

RefSeq ORF: 2136 bp

Locus ID: 327799

UniProt ID: [Q8C2S0](#)

Cytogenetics: 10 C2

MW: 80.9 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]