

Product datasheet for **RR209366**

Usp16 (NM_001100501) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp16 (NM_001100501) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Usp16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR209366 representing NM_001100501
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAAAGAAACGAACAAAGGGGAAAAGTGTTCAGAAAAGGCTTCTTCTGAATCTACAGAACCAATGT
 GCAGACACCTTAGAAAAGGGTTGGAACAAGGTAATTTGAAAAAGCTTTGGTAAATGTGGAATGGAATAT
 CTGCCAAGACTGTAAGACTGACAATAAAGTGAAAGATAAATCTGAGGAAGAAGCAGAAGACCCCTCGGTT
 TGGCTGTGTCTTAAATGTGGCCATCAGGGCTGTGGCAGAGATTCCAGGAGCAGCATGCCCTGAAGCACT
 ACACAACACCAAGGTCTGAACCTCACTACCTGGTGCTTAGTTGGACAACCTGGAGCGTCTGGTGTACAA
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 GCTGGCAGAATAACTTCAAAACCCAGAGAAAAATAATGGACACATTGAGCTTGAAAATAAAAAATTGGAGA
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 TGCTTCCAGATAACGGTGAAAGGACTCAGCAACTTGGGGAATACTTGTTCCTTCAACGCTGTTATGCAG
 AACTTGTCAAAAACGCCAGTGTAGAGAACTACTAAAAGAAAGTGAAGATGTCTGGAACAATTGTA
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 AGCCATGAGCCAGTTTCTTAATGAGATGCAAGAGAAACAAAAACGAATTGTAACACCTAAAGAGCTCTTT
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 AGTTTTGTGGACCGCATCTTCGGTGGCGAACTGACTAGTACAATCATGTGTGATGACTGCAGGACTGTCT
 CCTTGGTGCATGAGTCTTTCCTGATTGTCTCTCCAGTTTTAGATGATCAGAGTGGTAAGAAAAATAT
 AAATGATAAAAAATGTGAAGAAGACAATGGAGGAAGAAGATAAAGACAGTGAGGAAGAGAAAGATGACAGC
 TACATGAAAACACGGAGTGACGTGCCCTCAGGAACAAGCAAGCACACAGAAAGAAAGCAAAAGAACGAAG
 CAAAAAGCAAGCAAGAACCAACGAAGGCAACAAAAATTAAGAAAGGTTTCTTCACTTCAACGAGAT
 CTGCACCACTAACTACTGAAGACAATGACCATGAAGCTGAGACGGCACTTCCGGGAGAAGGGGAAGTG
 GATACTGAGTTCAACCGTGGCTCTCAAGAGGAGCTCACACAGACAGAGCTCTGTGCTAATCAGAAAGATG
 TGAATGGCCAAGAGGAAATGATAGAAAGCGCTGCCGATGAGCGGAAATGCCAGAGCACCCGGAGGTGAA
 AAGTGTGACGACCGAGAGTGATCTGGGGAGTTGACTTCTGCTCCTGAGTGTCTAGAGATTTAAATGGT
 GCCTTCTGGAAGAAAGGACCAGTGGAGAGCTAGACATTACCAATGGTTTAAAAACCTTACTTTGAATG
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 TTTTCCAGCAGGCTGGTTTTAACCTACGCAAAGTTAACAAACACATAAAGTTCCGGAAATCTTAGATTTGG
 CTCCTTTTTGTACCCTTAAATGTAAGAAGTGTGCTGAGGAAAGTACAAGAGTGTGTATTCTTATATGG
 AGTTGTGGAACACAGTGGCACTATGAGGTCAGGGCATTACACTGCCTACGCAAAGGAAAGAACTGCAAGC
 TGTCACTCTCTAATCTTGTCTTCAATGGTGACATTCCGCAAGATTGTGAAATGGAGTCAACCAAGGGC
 AGTGGTTTACATCAGCGACACACAGTGAAGCGGTGCCTATAACTAAAGTACTGAACTACAAGCTTA
 TCTCTATTTTATGAGAGAATACTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR209366 representing NM_001100501
Red=Cloning site Green=Tags(s)

MGKKRTKGKSVPEKASSESTEPMCRHLRKGLEQGNLKKALVNVEWNICQDCKTDNKVKDKSEEEAEDPSV
WLCLKCGHQCGRDSQEQHALKHYYTTPRSEPHYLVLSDNWSVWCYKCDEEIKYCSSNRLGQVVDYVRKQ
AGRITSKPEKNNGHIELENKLEKESKNEQEREKSESMAKENIPLDSASQITVKGLSNLGNTCCFFNAVMQ
NLSQTPVLRRELLKEVKMSGTIVKIEPPDLALTEPLEVNLEPPGPLTLAMSQFLNEMQENKKRIVTPKELF
SQVCKKATRFKGYQQDSQELLRYLLDGMRAEEHQRVSKGILKAFGNSTEKLDDEEVKNKVKDYEKKAIP
SFVDRIFGGELTSTIMCDDCRTVSLVHESFLDLVLPVLDQSGKKNINDKNVKKTMEEEDKDSEEEKDDS
YMKTRSDVPSGTSKHTQKKAKKQAKKQAKNQRQKIQERFLHFNEICTTNYTEDNDHEAETALPGEDEV
DTEFNRSQEELTQTELCANQKDVNGQEEMIESAADERKCEHPPEVKSVESTESDLGSLTSAPECPRDLNG
AFLEERTSGELDITNGLKNLTLNAAVDPDEISIEILNDSHSPALKVYEVMMNEDPETAFCTLANREAFSTD
ECSIQHCLYQFTRNEKLQDANKLLCEVCTRRCNGPKANIKGERKHVYTNAAKQMLVSLAPPVLTLLHKL
FQQAGFNLRKVNKHIKFPEILDAPFCTLKCKNVAEESTRVLYSLYGVVEHSGTMRSGHYTAYAKERTAS
CHLSNLVLHGDIPQDCEMESTKGQWFHISDTHVQAVPITKVLNSQAYLLFYERIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001100501

ORF Size: 2475 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_001100501.1](#), [NP_001093971.1](#)

RefSeq Size: 2903 bp

RefSeq ORF: 2478 bp

Locus ID: 288306

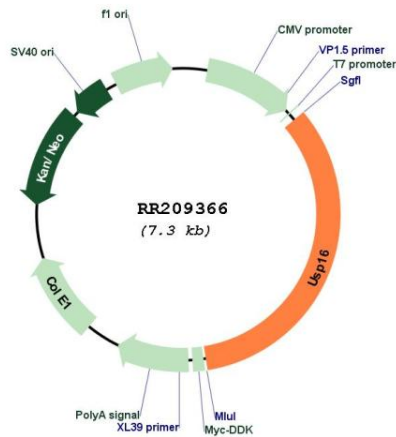
UniProt ID: [Q2KJ09](#)

Cytogenetics: 11q11

MW: 93.7 kDa

Gene Summary: Specifically deubiquitinates 'Lys-120' of histone H2A (H2AK119Ub), a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator. Deubiquitination of histone H2A is a prerequisite for subsequent phosphorylation at 'Ser-11' of histone H3 (H3S10ph), and is required for chromosome segregation when cells enter into mitosis. In resting B- and T-lymphocytes, phosphorylation by AURKB leads to enhance its activity, thereby maintaining transcription in resting lymphocytes. Regulates Hox gene expression via histone H2A deubiquitination. Prefers nucleosomal substrates. Does not deubiquitinate histone H2B. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR209366