

Product datasheet for MR211535

Usp28 (NM_175482) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp28 (NM_175482) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Usp28
Synonyms:	9830148O20Rik; AU022237; mKIAA1515
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211535 representing NM_175482 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTGCGGAGCTGCAGCAGGACGACTCGGCGGGGGCGGCGGACGGCCATGGCTCGAGCTGCCAGATGC
TGTTAAATCAGCTGCGAGAAATCACAGGCATCCAGGATCCTTCTTTTCTCATGAAGCATTAAAGGCCAG
TAATGGTGACATACCCAGGCTGTCAGCCTTCTCACAGACCAAAGAGTTAAGGAGCCAGTCACGACACA
ACTGCTGCAGAACCATCTGAAGTAGAAGAGAGTGCTACCAGCAAAGATCTTTAGCAAAAGTGATAGACC
TCACTCAGACAACAAAGATGACCTGCAGGCGCCATTGCCTTGAGTCTCCTGGAGTCTCCTAACATTCA
GGCTGACAACAGAGATCTTAATAGAGCGCATGAGGCTAACTCTGCAGAACTAAACGCTCAAAGAGAAAA
CGCTGTGAAGTTTGGGGAGAAAACCACAATCCCAATAACTGGAGGAGAGTGGATGGTTGGCCAGTTGGGC
TGAAAAATGTTGGCAACACATGTTGGTTCACTGCTGTTATTCACTCTCTTTCACTTGCCTGAATTTTCG
AAGACTTGTCTCAGTTATAACCTGCCACAGAACATCCTTGAAAATTGTCGAAGTCACACTGAAAAGAGA
AATATCATGTTTATGCAAGAGCTTCAGTATTTATTTGCTCTGTTGTTGGGATCAAATCGAAAATTTGTAG
ACCCTTCTGCAGCCCTGGATCTACTGAAGGAGCCTCCGATCATCCGAGGAGCAGCAGCAAGATGTGAG
TGAATTCACACACAAGCTCCTGGATTGGCTGGAGGATGCGTCCAGCTAGCTGTTAATGTTAACAGCCAT
CTCAGGAATAAATCTGAAAATCCCATGGTGCAGCTATTCTACGGTACTTTTCTGACAGAAGGGGTCGAG
AAGGAAAAGCCCTTTTGTAAACAATGAGACCTTCGGCCAGTATCCTCTTCAGGTAACGTTACCACAATT
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CAAGTTCTGCAGCAGAAGTTAGAAAGGTATGTGAAGTACGGCTCGGGCCCATCTCGTTCCTCACTCCCCG
ACATGTTGAAATACGTTATTGAATTTGCCAGTACAAAACCTGCCTCTGAAAGCTGTCTGTCTGGAAGTGC
TGAGCATGTGACATTACCACTTCCCTCGTGCAGTCCCGATTTCTGACCTCACACCAAGGAAAGTTCA



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AGTCCAGAAAGCTGCTCTCAGAATGCTGGAAGTACCTTTTCTCTCCAGAAGATGCTCTTCCCAGCTCTG
 AGGGGATGAATGGGCCATTTACCTCTCCTCACTCGTCTCTGAAAACGCCTGCACCCAGCTCCTCGGAC
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 TGGGAGGAAGAACAGTCTCTGTAAGATCCCACAGATGGAGTCTCCCGAACTCTTCTCACAGGATTTCT
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 TGCAAAAGAACAGACTGCCAGGCAATTGCCAACACAGCTCATGCCTACGAGAAGAGTGGTGTAGAAGCA
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 CTGCTTCTTTTTGAAACAAATGACGACCATTCTGTAACAGAGGGCATTAAATGTAATGAATGAGTTGAT
 CATTCCCTGCATCCACCTGATCATTAAACGACATCTCCAAGGACGACCTCGATGCCATCGAGGTCATG
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 TACCCAGGCTTCTAGATCCTTCTGCAGAAATCATCGTCCTAAAGGAGCCTCCAACCTATTCGACCGAATTC
 TCCCTATGATCTTTGCAACCGGTTTGCAGCTGTATGGAGTCCATTCAAGGAGTTTCAACAGTAACCGTG
 AAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211535 representing NM_175482
 Red=Cloning site Green=Tags(s)

MTAELQQDSDSAGAADGHGSSCQMLLNQLREITGIQDPSFLHEALKASNGDITQAVSLLTDQRVKESDHT
 TAAEPSEVEESATSKDLLAKVIDLTHDNKDDLQAAIALSLESPNIQADNRDLNRAHEANSAETKRSKRK
 RCEVWGENHNPNWRRVDGWVGLKNVNTWFSAVIQSLFQLPEFRRLVLSYNLPQNIENCRSHTEKR
 NIMFMQELQYLFALLLGSNRKFVDPASAALDLLKGAFRSSEEQQQDVSEFTHKLLDWLEDAFQLAVNVNSH
 LRNKSENPMVQLFYGTFLTEGVREGKPFCCNETFGQYPLQVNGYHNLDECLLEGAMVEGDIALLPSDRSVK
 YGQERWFTKLPPVLTFFELSRFEFNQSLGQPEKIHNKLEFPQIIYMDRYMYKSKELIRSKRESVRKLKEEI
 QVLQQKLERVYKYGSPSRFPLPDMLKYVIEFASTKPASESCLSGSAEHVTLPLPSVHCPISDLTPKESS
 SPESCSQNAAGSTFSSPEDALPSSEGMNGPFTSPHSSLETPAPPAPRTVTDEEMNFVKTCLQRWRSEIEQD
 IQDLKNCISSSTKAIIEQMYCDPLLRRQVPYRLHAVLVHEGQASAGHYWAYIYNQPRQTLWKYNDISVTESS
 WEELERDSYGGLRNVSAYCLMYINDNLPHFSAEASSNESDETAGVEALSVELRQYIQEDNWRVQVEVEE
 WEEEQSCKIPQMESSPNSSSQDFSTQSQSPAVSSHEVRCLSSHEHAVIAKEQTAQAIANTAHAYEKSGVEA
 ALSEAFHEEYSRLYQLAKETPTSHSDPRLQHLVYFFQNEAPKRVVVERTLLEQFADRNLSDYERSISIMK
 VAQAKLMEIGPDDMNMEYKRWHEDEYSLFRKVSVYLLTGLELFQKGYQEALSYLVYAYQSNAGLLVKG
 RRGVKESVIALYRRKCLLELNAKAASL FETNDDHSVTEGINVMNELIIPCIIHLIINNDISKDDLDAIEVM
 RNHWCSYLKGDIAENLQLCLGEFLPRLLDPSAEIIVLKEPPTIRPNSPYDLNCRFAAVMESIQGVSTVTV
 K

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9039_g02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_175482

ORF Size: 3153 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_175482.3](#), [NP_780691.2](#)

RefSeq Size: 4220 bp

RefSeq ORF: 3156 bp

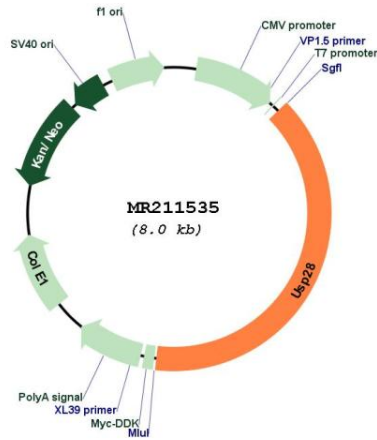
Locus ID: 235323

UniProt ID: [Q5I043](#)

Cytogenetics: 9 A5.3
MW: 119.8 kDa

Gene Summary: Deubiquitinase involved in DNA damage response checkpoint and MYC proto-oncogene stability. Involved in DNA damage induced apoptosis by specifically deubiquitinating proteins of the DNA damage pathway such as CLSPN. Also involved in G2 DNA damage checkpoint, by deubiquitinating CLSPN, and preventing its degradation by the anaphase promoting complex/cyclosome (APC/C). In contrast, it does not deubiquitinate PLK1. Specifically deubiquitinates MYC in the nucleoplasm, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with FBXW7 (FBW7alpha) in the nucleoplasm and counteracting ubiquitination of MYC by the SCF(FBXW7) complex. Deubiquitinates ZNF304, hence preventing ZNF304 degradation by the proteasome and leading to the activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) in a subset of colorectal cancers (CRC) cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211535