

## Product datasheet for **RC223890**

### USP28 (NM\_020886) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	USP28 (NM_020886) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP28
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223890 representing NM_020886 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTGCGGAGCTGCAGCAGGACGACGCGGCCGGCGCGGCAGACGGCCACGGCTCGAGCTGCCAAATGC  
TGTTAAATCAACTGAGAGAAATCACAGGCATTCAGGACCCCTTCTTTCTCCATGAAGCTCTGAAGGCCAG  
TAATGGTGACATTACTCAGGCAGTCAGCCTTCTACTGATGAGAGAGTTAAGGAGCCAGTCAAGACACT  
GTTGCTACAGAACCATCTGAAGTAGAGGGGAGTCTGCCAACAAGGAAGTATTAGCAAAAATTATAGACC  
TTACTCATGATAACAAAGATGATCTTTCAGGCTGCCATTGCTTTGAGTCTACTGGAGTCTCCCAAAATTC  
AGCTGATGGAAGAGATCTTAACAGGATGCAATGAAGCAACCTCTGCAGAACTAAACGCTCAAAGAGAAAA  
CGCTGTGAAGTCTGGGGAGAAAACCCCAATCCCAATGACTGGAGGAGAGTTGATGGTTGGCCAGTTGGGC  
TGAAAAATGTTGGCAATACATGTTGGTTTGTGCTGTTATTTCAGTCTCTCTTTCAATTGCCTGAATTTTCG  
AAGACTTGTCTCAGTTATAGTCTGCCACAAAATGTAAGTGAATAATGTCGAAAGTCATACAGAAAAGAGA  
AATATCATGTTTATGCAAGAGCTTCAGTATTTGTTTGTCTAATGATGGGATCAAATAGAAAATTTGTAG  
ACCCGTCTGCAGCCCTGGATCTATTAAGGGAGCATTCCGATCATCTGAGGAACAGCAGCAAGATGTGAG  
TGAATTCACACACAAGCTCCTGGATTGGCTAGAGGACGCATTCCAGCTAGCTGTTAATGTTAACAGCAGT  
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AGACGAGTGTTTGAAGGGGCCATGGTGGAGGGTATGTTGAGCTTCTCCCTCCGATCACTCGGTGAAG  
TATGGACAAGAGCGTTGGTTTACAAAGCTACCTCCAGTGTGACCTTTGAACTCTCAAGATTTGAGTTTA  
ATCAGTCCCTTGGGCAGCCAGAGAAAAATCACAATAAGCTGGAATTTCTCAGATTTATATGAGCAG  
GTACATGTACAGGAGCAAGGAGCTTATTCGAAATAAGAGAGAGTGTATTCGAAAGTTGAAGGAGGAAATA  
AAAATTCGCAGCAAAAATGGAAGGTATGTAAATAATGGCTCAGGCCAGCTCGGTTCCCGCTCCCGG  
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AGTACAGAAAAGCTTCTCAGGATGTTGAAAGTACCTTTTCTTCTCCTGAAGATTTTACCCAAGTCTA  
AACCCTGACATCTTCTCGGTCTTCCATGGAAATGCCTTCACAGCCAGCTCCACGAACAGTCACAGATGA



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GGAGATAAATTTTGTAAAGACCTGTCTTCAGAGATGGAGGAGTGAGATTGAACAAGATATACAAGATTTA  
 AAGACTTGTATTGCAAGTACTACTCAGACTATTGAACAGATGACTGCGATCCTCTCCTTCGTCAGGTGC  
 CTTATCGCTTGCATGCAGTTCTTGTTCATGAAGGACAAGCAAATGCTGGACACTATTGGGCTATATCTA  
 TAATCAACCCCGACAGAGCTGGCTCAAGTACAATGACATCTCTGTACTGAATCTTCTGGGAAGAAGTT  
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 CCTACTTCAATGCAGAGGCAGCCCCAACTGAATCAGATCAAATGTCAGAAGTGGAAAGCCCTATCTGTGGA  
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 GGTCTGAAGCAGGGCTGATTAAGGCATTCCATGAAGAATACTCCAGGCTCTATCAGCTTGCCAAAGAGAC  
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 TTGAGGTCATGAGAAACCATTGGTGCTTACCTTGGCAAGATATTGCAGAAAATCTGCAGCTGTGCCCT  
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 CGACCCAAATCTCCCTATGACCTATGTAGCCGATTTCAGCTGTATGGAGTCAATTCAGGGAGTTTCAA  
 CTGTGACAGTGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC223890 representing NM\_020886  
 Red=Cloning site Green=Tags(s)

MTAELQQDDAAGAADGHGSSCQMLLNQLREITGIQDPSFLHEALKASNGDITQAVSLLTDERVKEPSQDT  
 VATEPSEVEGSAANKEVLAKVIDLTHDNKDDLQAAIALSLLLESPKIQADGRDLNRMHEATSAETKRSKRK  
 RCEVWGENPNPNDRWRVDGWVGLKNVNTWCFSAVIQSLFQLPEFRRLVLSYSLPQNVLENCRSHTTEKR  
 NIMFMQELQYLFALMMGSRKFDVPSAALDLLKGAFRSSEEQQQDVSEFTHKLLDWLEDAFLAVNVNSP  
 RNKSENPMVQLFYGTFLTEGVREGKPFNNETFGQYPLQVNGYRNLDECLLEGAMVEGDVELLPSDHSVYK  
 GQERWFTKLPPVLTFFELSRFEFNQSLGQPEKIHNLKLEFPQIIYMDRYMYRSKELIRNKRECIRKLKEEIK  
 ILQQKLERVYKYGSGPARFPLPMLKYVIEFASTKPASESCPPESDTHMTLPLSSVHCSVSDQTSKESTS  
 TESSSQDVESTFSSPEDSLPKSKPLTSSRSSMEMPSQPAPRTVTDEEINFVKTCLQRWRSEIEQDIQDLK  
 TCIASSTQTIEQMYCDPLLQVPYRLHAVLVHEGQANAGHYWAYIYNQPRQSWLKYNDISVTESSWEEVE  
 RDSYGGRLRNVSAYCLMYINDKLPYFNAEAAPTESDQMSEVEALSVELKHYIQEDNWRFEQEVEEWEQES  
 CKIPQMESSTNSSQDYSTSQEPSVASSHGVRCLSSEHAVIVKEQTAQAIANTARAYEKSGVEAALSEVM  
 LSPAMQGVILAIAKARQTFDRDGSEAGLIKAFHEEYSRLYQLAKETPTSHSDPRLQHVLYVFFQNEAPKR  
 VVERTLLEQFADKNLSYDERSISIMKVAQAKLKEIGPDDMNMEYKWHEDYSLFRKVSVYLLTGLELYQ  
 KGKYQEALSYLVYAYQSNAALLMKGPRRGVKESVIALYRRKCLLELNAKAASFETNDHDSVTEGINVMN  
 ELIIPCIIHLIINNDISKDDLDAIEVMRNHWCSYLGQDIAENLQLCLGFLPRLLDPSAEIIVLKEPPTIR  
 PNSPYDLCSRFAAVMESIQGVSTVTVK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_020886

**ORF Size:** 3234 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\\_020886.4](#)

**RefSeq Size:** 4642 bp

**RefSeq ORF:** 3234 bp

**Locus ID:** 57646

UniProt ID: [Q96RU2](#)

Cytogenetics: 11q23.2

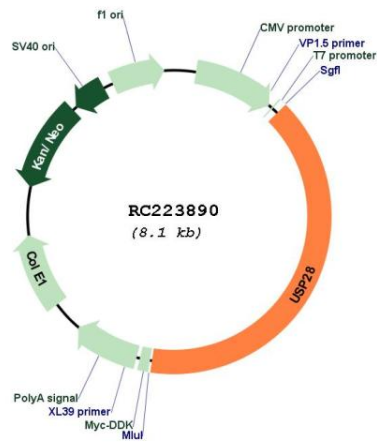
Domains: UCH

Protein Families: Protease

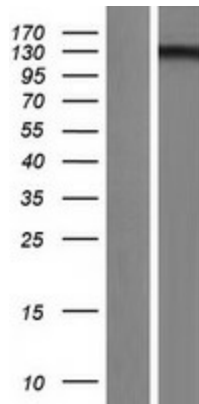
MW: 122.3 kDa

Gene Summary: The protein encoded by this gene is a deubiquitinase involved in the DNA damage pathway and DNA damage-induced apoptosis. Overexpression of this gene is seen in several cancers. [provided by RefSeq, Oct 2016]

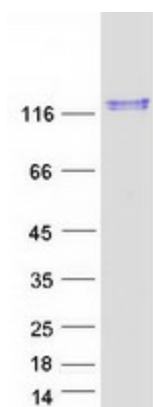
### Product images:



Circular map for RC223890



Western blot validation of overexpression lysate (Cat# [LY412247]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223890 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified USP28 protein (Cat# [TP323890]). The protein was produced from HEK293T cells transfected with USP28 cDNA clone (Cat# RC223890) using MegaTran 2.0 (Cat# [TT210002]).