

Product datasheet for **RC200835**

USP10 (NM_005153) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP10 (NM_005153) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP10
Synonyms:	UBPO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC200835 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCTCCACAGCCCGCAGTATATTTTTGGAGATTTAGCCCTGATGAATTCAATCAATCTTTGTGA
 CTCTCGATCTTCAGTTGAGCTTCTCCATACAGTGGAACAGTTCTGTGTGGCACACAGGCTGTGGATAA
 ACTACCTGATGGACAAGATATCAGAGAATTGAGTTTGGTGTGATGAAGTCATTGAACCCAGTGACACT
 TTGCCGAGAACCCAGCTACAGTATTTCAAGCACACTGAACCCCTCAGGCCCTGAATTTATTCTCGTT
 GTACAGCTTCCAAAATAACCCCTGATGGTATCACTAAAGAAGCAAGCTATGGCTCCATCGACTGCCAGTA
 CCCAGGCTCTGCCCTCGCTTTGGATGGAAGTTCTAATGTGGAGGCGGAAGTTTGGAAAATGATGGTGTG
 TCAGTGGTCTTGACAAAGGGAGCGTAAAAAGAAGAAAAGCGGCCACCTGGATATTACAGCTATTTGA
 AAGATGGTGGCGATGATAGTATCTCCACAGAAGCCCTGGTCAATGGCCATGCCAATTCAGCAGTCCCGAA
 CAGTGTGAGTGCAGAGGATGCAGATTTATGGGTGACATGCCTCCGCCACTTACGCCCAGGACTTGAAC
 AGCCCCAGAACTCCACAGACTCTGTGAGTGCATTGTGCCTGACAGTCTTTCCCCGGAGCACTCGGCA
 GTGACACCAGGACTGCAGGGCAGCCAGAGGGGGGCCCGGGGCTGATTTGGTCACTCTGCTTCCCTGC
 AGAGGCTGGCAGAGACACCCTGTCAAGGACAGCTGGGGCTCAGCCCTGCCTGGTACCGATACTACTGAA
 AACCTTGGAGTTGCTAATGGACAATACTTGAATCCTCGGGTGGAGGCACAGCTACCAACGGGGTGGAGT
 TGCACACCACGAAAGCATAGACTTGGACCAACCAACCCGAGAGTGCATCACCTCCTGCTGACGGCAC
 GGGCTCTGCATCAGGCACCCTTCTGTGAGCCAGCCCAAGTCTGGGCCAGCCTTTTCATGATTCTAAG
 CCCTCTTCTCCTCGCCGGTGGCCTATGTGAAACTAAGTATCCCTCCCGCCATATCTCCCTGGTTT
 TGAAAAGCAGGTTGAAGTCAAAGAAGGGCTTGTCCGGTTTCAGAGGATCCTGTAGCCATAAAGATTGC
 AGAGTTGCTGGAGAATGTAACCCTAATCCATAAACCCAGTGTGTTGCAACCCCGTGGGCTGATCAATAAA
 GGGAACTGGTGTACATTAATGCTACACTGCAGGCATTGGTTGCTTGCCCGCCGATGACCACCTGATGA
 AGTTTCTCTCTGATTTCCAAAGTCAAAGGCCTTGTACGTCAACACCCATGATAGACAGCTTTGTTTCG
 GCTAATGAATGAGTTCACATAATGCCAGTACCTCCAAAACCCGACAAGCTCTTGGAGATAAAATCGTG
 AGGGATATTGCCCTGGAGCTGCCTTTGAGCCACATATATTTACAGACTCCTGACAGTTAAACAAGTCAA
 GCCTGTCTGAAAAGGTCGACAAGAAGATGCTGAGGAATACTTAGGCTTCAATCTAAATGGACTTCATGA
 GGAATGTTGAACCTAAAGAAGCTTCTCTACCAAGTAAATGAAAACTTACGATTTCCAACGGCCCCAAA
 AACCACTCGGTCAATGAAGAAGAGCAGGAAGAACAAGGTGAAGGAAGCGAGGATGAATGGGAACAAGTGG
 GCCCCCGAACAAGACTTCCGTCACCCGCCAGGCGGATTTTGTTCAGACTCCAATCACCGCATTTTTGG
 TGGACACATCAGGTCTGTGGTTTACCAGCAGAGTTCAAAAGAATCTGCCACTTTCAGCCATTTTTCACG
 TTGAGTGGATATCCAGTCAGACAAGATACGCACAGTCCAGGATGCACTGGAGAGCTTGGTGGCAAGAG
 AATCTGTCCAAGTTATACCACAAAACCAACAAAGAGTTGAGATAAGTCGAAGAGTACTCTGGAAAA
 ACTCCCTCCTGTCTCGTGTGCACCTGAAACGATTCGTTATGAGAAGACTGGTGGGTGCCAGAAGCTT
 ATCAAAAATATTGAATATCCTGTGGACTTGGAAATAGTAAAGAAGTCTTTCTCCAGGGGTTAAAAATA
 AGAATTTAAATGCCACCGAACCTATCGGCTCTTTCAGTGGTCTACCATCACGGCAACAGTGCACGGG
 CGGCCATTACACTACAGACGCTTCCAGATCGGTCTGAATGGCTGGCTGCGCATCGATGACCAGACAGTC
 AAGGTGATCAACCAGTACCAGGTGGTGAACCAACTGCTGAACGCACAGCCTACCTCCTGTATTACCGCC
 GAGTGGACCTGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200835 protein sequence
Red=Cloning site Green=Tags(s)

MALHSPQYIFGDFSPDEFNQFFVTPRSSVELPPYSGTVLCGTQAVDKLPDGQEYQRIEFGVDEVIEPSDT
LPRTPSYSISSTLNPQAPEFILGCTASKITPDGITKEASYGSIDCQYPGSALALDGSSNVEAEVLENDGV
SGGLGQREKRRKKKPPGYYSYKDGDDSI STEALVNGHANSVAVPNSVSAEDA EFMGDMPPPLTPRTC
SPQNSTDSVSDIVPDSFPFGALGSDTRTAGQPEGPGADFGQSCFPAEAGRDTLSRTAGAQPCVGTDTTE
NLGVANGQILESSGEGTATNGVELHTTESIDLDPKPEASPPADGTGSASGTL PVSQPKSWASLFHDSK
PSSSSPVAYVETKYSPPAISPLVSEKQVEVKEGLVPVSEDPVAIKIAELLENTL IHKPVSLQPRGLINK
GNWCYINATLQALVACPPMYHLMKFIPLYSKVQRPCSTPMIDSFVRLMNEFTNMPVPPKPRQALGDKIV
RDIRPGA AFEPTYIYRLLTVNKSSLSEKGRQEDAE EYLGFILNGLHEMLNLKLLSPSNEKLTISNGPK
NHSVNEEEQEEQEGESEDWEQVGRNKTSVTRQADFVQTPITGIFGGHIRSVVYQQSSKESATLQPFFT
LQLDIQSDKIRTVQDALESLVARESVQGYTTTKQVEV I SRRVTLEKLPVVLVHLKRFVYEKTGGCQKL
IKNIEYPVDLEISKELLSPGVKNKFKCHR TYRLF AVVYHHGNSATGGHYTTDFVQIGLNGWLRIDDQTV
KVINQYQVVKPTAERTAYLLYRRVDLL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6209_h04.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005153

ORF Size: 2394 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005153.1](#), [NP_005144.1](#)

RefSeq Size: 3399 bp

RefSeq ORF: 2397 bp

Locus ID: 9100

UniProt ID: [Q14694](#)

Cytogenetics: 16q24.1

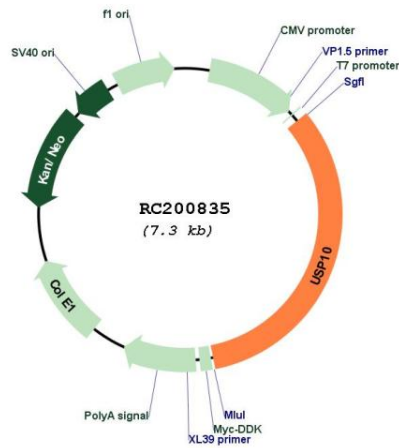
Domains: UCH

Protein Families: Druggable Genome, Protease

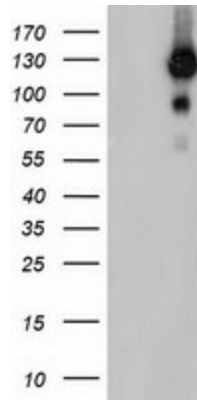
MW: 87.2 kDa

Gene Summary: Ubiquitin is a highly conserved protein that is covalently linked to other proteins to regulate their function and degradation. This gene encodes a member of the ubiquitin-specific protease family of cysteine proteases. The enzyme specifically cleaves ubiquitin from ubiquitin-conjugated protein substrates. The protein is found in the nucleus and cytoplasm. It functions as a co-factor of the DNA-bound androgen receptor complex, and is inhibited by a protein in the Ras-GTPase pathway. The human genome contains several pseudogenes similar to this gene. Several transcript variants, some protein-coding and others not protein-coding, have been found for this gene. [provided by RefSeq, Jan 2013]

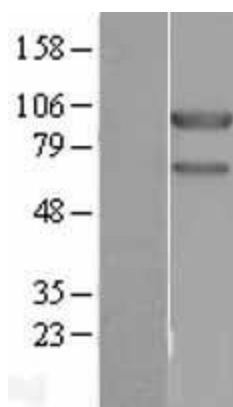
Product images:



Circular map for RC200835



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY USP10 (Cat# RC200835, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-USP10 (Cat# [TA503878]). Positive lysates [LY417493] (100ug) and [LC417493] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417493]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200835 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).