

Product datasheet for RC213986

USP7 (NM_003470) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP7 (NM_003470) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP7
Synonyms:	HAFOUS; HAUSP; TEF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213986 representing NM_003470 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCACCAGCAGCAGCAGCAGCAGCAGCAGAAAGCGGGCGAGCAGCAGTTGAGCGAGCCCGAGGACATGG
AGATGGAAGCGGGAGATACAGATGACCCACCAAGAATTACTCAGAACCCTGTGATCAATGGGAATGTGGC
CCTGAGTGATGGACACAACACCGCGGAGGAGGACATGGAGGATGACACCAGTTGGCGCTCCGAGGCAACC
TTTCAGTTCAGTGTGGAGCGCTTCAGCAGACTGAGTGAGTCGGTCCTTAGCCCTCCGTGTTTTGTGCGAA
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CTTTCTCCAGTGAATGCTGAATCTGATTCCACGTCATGGTCTTGCCATGCACAAGCAGTGCTGAAGATA
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TCACGAATCAGCTACGAAAGGCTGTGTACATGATGCCAACCGAGGGGGATGATTCGTCTAAAAGCGTCCC
TTTAGCATTACAAAGAGTGTCTATGAATTACAGCATAGTGATAAACCTGTAGGAACAAAAAGTTAACA
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AATGGTGTCTATATCCAGTGTAAAGAAGTAGACTATCGTCTGATAGAAGAGAAGATTATTATGATATC
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GAGGAAGCAATTGAGCACAATTATGGGGTCCACGATGACGACCTGTCTGTTCGACACTGCACTAATGCTT
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 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213986 representing NM_003470
 Red=Cloning site Green=Tags(s)

MNHQQQQQQKAGEQQLSEPEDMEMEAGDTPPPRITQNPVINGNVALSDGHNTAEEDMEDDTSWRSEAT
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 TGYVGLKNQGATCYMNSLLQTLFFTNQLRKAVYMPTEGDDSSKSVPLALQRFVYELQHSKDPVGTKKLT
 KSFGWETLDSFMQHDVQELCRVLLDNVENKMKGTCEVGTIPKLFKGMVSYIQCKEVDYRSDRREDYDI
 QLSIKGKKNIFESFVDYVAVEQLDGDNKYDAGEHGLQEAEGVKFLTLPPVLHLQLMRMYDPQTQONIK
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 GTKRPAML DNEADGNKTMIELSDNENPWTIFLETVDPELAASGATLPKFDKDHVMLFLKMYDPKTRSLN
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 DDPENDNSELPTAKEYFRDLYHRVDVIFCDKTI PNDPGFVVTLSNRMNYFQVAKTVAQRLNDPMLLQFF
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 YPDKHGCVRDLLEECKKAVELGEKASGLRLL EIVSYKIGVHQEDELLECLSPATSRTFRFIEEIPLDQV
 DIDKENEMLVTVAHFHKEVFGTFGIPFLLRIHQGEHFREVMKRIQSLLDIQEKEFEKFKFAIVMMGRHQY
 INEDEYEVNLKDFEPQPGNMSHPRPWLGLDHFNKAPKRSRYTYLEKAIKIHN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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_003470.3](#)

RefSeq Size: 4022 bp

RefSeq ORF: 3309 bp

Locus ID: 7874

UniProt ID: [Q93009](#)

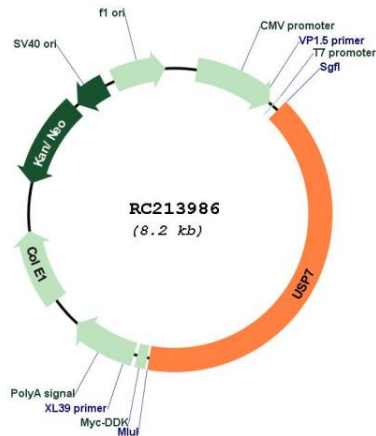
Cytogenetics: 16p13.2

Domains: UCH, MATH

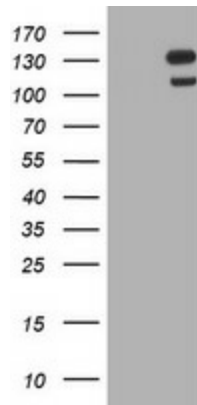
Protein Families: Druggable Genome, Protease

MW: 128.1 kDa

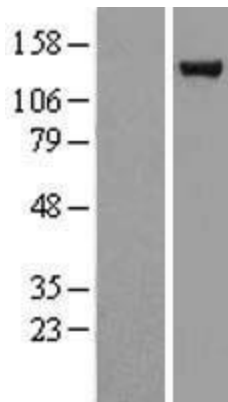
Gene Summary: The protein encoded by this gene belongs to the peptidase C19 family, which includes ubiquitinyl hydrolases. This protein deubiquitinates target proteins such as p53 (a tumor suppressor protein) and WASH (essential for endosomal protein recycling), and regulates their activities by counteracting the opposing ubiquitin ligase activity of proteins such as HDM2 and TRIM27, involved in the respective process. Mutations in this gene have been implicated in a neurodevelopmental disorder. [provided by RefSeq, Mar 2016]

Product images:


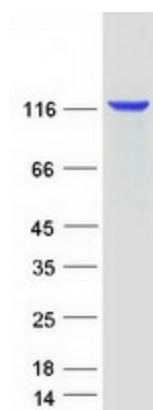
Circular map for RC213986



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY USP7 (Cat# RC213986, 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-USP7 (Cat# [TA503987]). Positive lysates [LY401171] (100ug) and [LC401171] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401171]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213986 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified USP7 protein (Cat# [TP313986]). The protein was produced from HEK293T cells transfected with USP7 cDNA clone (Cat# RC213986) using MegaTran 2.0 (Cat# [TT210002]).