

Product datasheet for RC216926

USP8 (NM_005154) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP8 (NM_005154) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	USP8
Synonyms:	HumORF8; PITA4; SPG59; UBPY
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216926 representing NM_005154 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTGGCTTCAGTTCCTAAAGAACTCTACCTCAGTTCCTCACTAAAAGACCTTAATAAGAAGA
CAGAAGTTAAACCAGAGAAAATAAGCACTAAGAGTTATGTGCACAGTGCCTGAAGATCTTTAAGACAGC
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CCCAAAAGAGCAATGGTAAAAGAATGAAAAATGTGAGACCAAAGAGAAAGGAGCAATCACAGCAAAGGA
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AAAGAGAACTGAGGAAGGAAGAACAAGAACAAAAAGCCAAAAAGAAACAAGAAGCTGAAGAAAATGAAA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>RC216926 representing NM_005154
 Red=Cloning site Green=Tags(s)

MPAVASVPKELYLSSSLKDLNKKTEVKEPKISTKSYVHSALKIFKTAEECRLLDRDEERAYVLYMKYVTVY
 NLIKKRPDFKQQDYFHSILGPGNIKKAVEEAERLSESLKLYEEAEVRKKLEEKDRQEEAQLQQRQE
 TGREDGGTLAKGSLENVLDSKDKTQKSNGEKNEKCEKKEGAIKELYMMTDKNISLIIMDARRMQDY
 QDSCILHSLVPEEAI SPGVTASWIEAHL PDDSKDTWKKRGNVEYVLLDWFSSAKDLQIGTTLRSLKDA
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 AQREPLTRARSEEMGRIVPLPSGWAKFLDPIGTFRYYHSPTNTVHMYPPEMAPSSAPPSTPPTHKAKP
 QIPAERDREPSKLRYSYSPDITQAIQEEERKPTVTPVNRNKPCTCYPKAEISRLSASQIRNLPVFG
 GSGPALTGLRNLGNTCYMNSILQCLCNAPHLADYFNRCYQDDINRSNLLGHKGEVAEEFGIIMKALWTG
 QYRISPKDFKITIGKINDQFAGYSQQEQLLFLMDGLHEDLNKADNRKRYKEENNDHDDFKAAEHA
 WQKHKQLNESIIIVALFQGQFKSTVQCLTCHKKSRTFEAFMYLSLPLASTSKCTLQDCLRLFSSKEEKLTDN
 NRFYCSHCRARRDSLKKIEIWKLPVLLVHLKRFSDYDGRWKQLQTSVDFPLENLDLSQYVIGPKNNLKK
 YNLFVSNHYGGLDGGHYTAYCKNAARQRWFKFDDHEVSDISVSSVKSSAAYILFYTSLGPRVTDVAT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2901_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005154

ORF Size: 3354 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_005154.5](#)

RefSeq Size: 4250 bp

RefSeq ORF: 3357 bp

Locus ID: 9101

UniProt ID: [P40818](#)

Cytogenetics: 15q21.2

Domains: UCH, RHOD

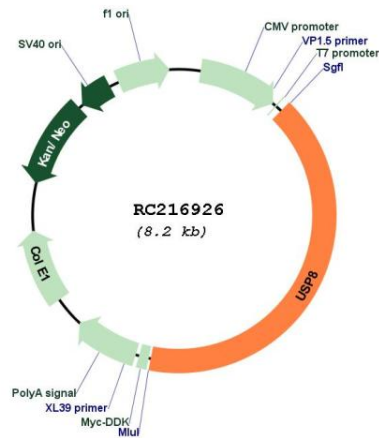
Protein Families: Druggable Genome, Protease

Protein Pathways: Endocytosis

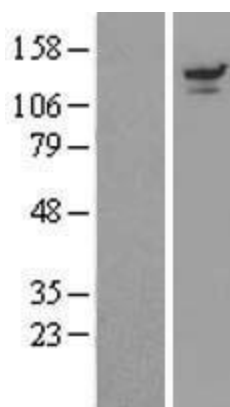
MW: 127.3 kDa

Gene Summary: This gene encodes a protein that belongs to the ubiquitin-specific processing protease family of proteins. The encoded protein is thought to regulate the morphology of the endosome by ubiquitination of proteins on this organelle and is involved in cargo sorting and membrane trafficking at the early endosome stage. This protein is required for the cell to enter the S phase of the cell cycle and also functions as a positive regulator in the Hedgehog signaling pathway in development. Pseudogenes of this gene are present on chromosomes 2 and 6. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013]

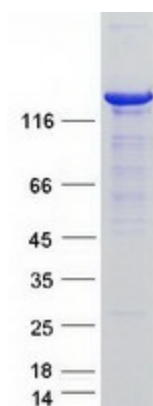
Product images:



Circular map for RC216926



Western blot validation of overexpression lysate (Cat# [LY426973]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226337] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified USP8 protein (Cat# [TP316926]). The protein was produced from HEK293T cells transfected with USP8 cDNA clone (Cat# RC216926) using MegaTran 2.0 (Cat# [TT210002]).