

Product datasheet for **RG216926**

USP8 (NM_005154) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP8 (NM_005154) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	USP8
Synonyms:	HumORF8; PITA4; SPG59; UBPY
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216926 representing NM_005154 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTGGCTTCAGTTCCTAAAGAACTCTACCTCAGTTCCTCACTAAAAGACCTTAATAAGAAGA
CAGAAGTTAAACCAGAGAAAATAAGCACTAAGAGTTATGTGCACAGTGCCTGAAGATCTTTAAGACAGC
AGAAGAATGCAGATTAGATCGTGATGAGGAAAGGGCCTATGACTATATGAAATACGTGACTGTTTAT
AATCTTATCAAAAAAGACCTGATTTCAAGCAACAGCAGGATTATTTCCATTCAACTTGGACCTGGAA
ACATCAAAAAAGCTGTCGAAGAAGCTGAAAGACTCTCTGAAAGCCTTAAATTAAGATATGAAGAAGCTGA
AGTCCGAAAAAAGCTTGAGGAAAAAGACAGGCAGGAGGAAGCACAGCGGCTACAACAAAAAGGCAGGAA
ACAGGAAGAGAGGATGGTGGCACATTGGCTAAAGGCTCTTTGGAGAATGTTTTGGATTCCAAGACAAAA
CCCAAAAGAGCAATGGTAAAAGAATGAAAAATGTGAGACCAAAGAGAAAGGAGCAATCACAGCAAAGGA
ACTATACACAATGATGACGGATAAAAACATCAGCTTGATTATAATGGATGCTCGAAGAATGCAGGATTAT
CAGGATTCCTGTATTTTACATTCCTCAGTGTTCTGAAGAAGCCATCAGTCCAGGAGTCACTGCTAGTT
GGATTGAAGCACACCTGCCAGATGATTCTAAAGACACATGGAAGAAGAGGGGGAATGTGGAGTATGTGGT
ACTTCTTGACTGGTTTAGTTCTGCCAAAGATTTACAGATTGGAACAACCTCCGGAGTCTGAAAGATGCA
CTTTTCAAGTGGAAAGTAAAAGTGTCTGCGCAATGAGCCTTTGGTTTTAGAGGGAGGCTATGAAAAC
GGCTCCTTTGTTATCCCCAGTATACAACAAATGCTAAGGTCACCTCACCCACGACGCCAGAATGAAGA
GGTGTCTATCTATTGGATTTTACTTATCCCTCATTGGAAGAATCAATTCCTTCTAAACCTGCTGCCAG
ACGCCACCTGCATCTATAGAAGTAGATGAAAATATAGAATTGATAAGTGGTCAAAATGAGAGAATGGGAC
CACTGAATATATCAACTCCAGTTGAACCAAGTTCGCTGCTTCTAAATCTGATGTTTACCCATAATTCAGCC
AGTGCCTAGTATAAAGAATGTTCCACAGATTGATCGTACTAAAAAACCAGCAGTCAAATTCCTGAAGAG
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GTTCCACCAAGCCAGTAGTTTTTCTCCAACCTCATGTTAACAGATGAAGAAAAGGCTCGTATTTCATGC
AGAAACTGCTCTTCTAATGGAAAAAACAACAAGAAAAAGAACTTCGGGAAAGGCAGCAAGAGGAACAG



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AAAGAGAACTGAGGAAGGAAGAACAAGAACAAAAAGCCAAAAAGAAACAAGAAGCTGAAGAAAATGAAA
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 TGGCAGAAACACAAGCAGCTCAATGAGTCTATTATTGTTGCACTTTTTCAGGGTCAATTCAAATCTACAG
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 TATAATTTGTTTTCTGTTTCAAATCACTACGGTGGCTGGATGGAGGCCACTACACAGCCTATTGTA
 ATGCAGCAAGACAACGGTGGTTTAAAGTTTATGATCATGAAGTTTCTGATATCTCCGTTTCTTGTGAA
 ATCTTCAGCAGCTTATATCTCTTTTACTTTCATTGGGACCACGAGTAACTGATGTAGCCACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG216926 representing NM_005154
 Red=Cloning site Green=Tags(s)

MPAVASVPKELYLSSSLKDLNKKTEVKPEKISTKSYVHSALKIFKTAEECRDRDEERAYVLYMKYVTVY
 NLIKRRPDKFQQQDYFHSILGPGNIKKAVEEAERLSESLKLYEEAEVRKLEEKDRQEEAQRLLQQRQE
 TGREDGGTLAKGSLENVLDSKDKTQKSNGEKNEKCEKKEGAIKELYTMMDKNISLIIMDARRMQDY
 QDSCILHSLVPEEAIISPGVTASWIEAHLPPDDSKDTWKKRGNVEYVLLDWFSSAKDLQIGTTLRSLKDA
 LFKWESKTVLRNEPLVLEGGYENWLLCYPQYTTNAKVTPPPRRQNEEVSISLDFTYPSLEESIPSKPAAQ
 TPPASIEVDENIELISGQNERMGPLNISTPVEPVAASKSDVSPIIQPVPSIKNVPQIDRTKKPAVKLPEE
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 KEKLRKEEQEQKAKKKQEAENEITEKQKAKEEMEKKESEQAKKEDKETSAKRGEITGVKRQSKSEHE
 TSDAKKSVEDRGKRCPTPEIQKKSTGDVPHTSVTGDGSGGKPFKIKGQPESEGILRTGTFREDTDDTERNK
 AQRPLTRARSEEMGRIVPLPSGWAKFLDPIITGTFRYHHSPTNTVHMYPPEMAPSSAPPSTPPTHKAKP
 QIPAERDREPSKLRYSYSPDITQAIQEEERKPTVPTVNRENKPTCYPKAEISRLSASQIRNLNPVFG
 GSGPALTGLRNLGNTCYMNSILQCLCNAPHLADYFNRCYQDDINRSNLLGHKGEVAEEFGIIMKALWTG
 QYRISPKDFKITIGKINDQFAGYSQQDSQELLLFLMDGLHEDLNKADNRKRYKEENNDHLDFFKAAEHA
 WQKHQQLNESIIIVALFQGQFKSTVQCLTCHKKSRTFEAFMYLSLPLASTSKCTLQDCLRLFKEEKLTDN
 NRFYCSHCRARRDSLKKIEIWKLPVLLVHLKRFSDYDGRWKQLQTSVDFPLENLDL SQYVIGPKNNLKK
 YNLFVSNHYGGLDGGHYTAYCKNAARQRWFKFDDEHVSISVSSVKSSAAYILFYTSLGPRVTDVAT

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-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

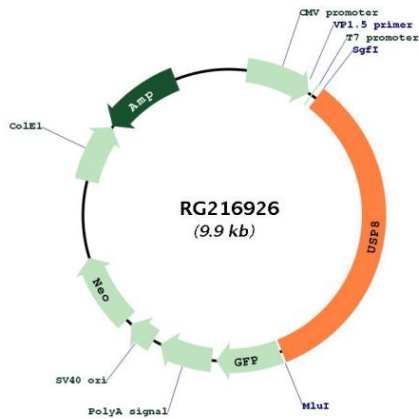
Locus ID: 9101

UniProt ID: [P40818](#)

Cytogenetics: 15q21.2
Domains: UCH, RHOD
Protein Families: Druggable Genome, Protease
Protein Pathways: Endocytosis
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 RG216926