OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC115950

USP20 (NM_006676) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP20 (NM_006676) Human Untagged Clone
Tag:	Tag Free
Symbol:	USP20
Synonyms:	hVDU2; LSFR3A; VDU2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_006676 edited

```
TTCGGCACGAGGGTTGCGAGTGCAGGCTCCTTGCCAGAGGCCTCCACTCACTCCAGACCC
CTATAGCCCGTCGCTGTCAGCTGTCAACAAAGGATGCGAATGCTGGCCGCTTCCTGTGGG
CTTCGTGTCACCCAGAGGTGAGCCCAGGCCAGGATGGGGGACTCCAGGGACCTTTGCCCT
CACCTTGACTCCATAGGAGAGGTGACCAAAGAGGACTTGCTGCTCAAATCTAAGGGAACC
TGTCAGTCGTGTGGGGTCACCGGACCAAACCTATGGGCCTGTCTGCAGGTTGCCTGCCCC
TATGTTGGCTGCGGAGAATCCTTCGCTGACCACAGCACCATTCATGCACAGGCAAAAAAG
CACAACTTGACCGTGAACCTGACCACGTTCCGACTGTGGTGTTACGCCTGTGAGAAGGAG
GTATTCCTGGAGCAGCGGCTGGCAGCCCCTCTGCTGGGCTCCTCTTCCAAGTTCTCTGAA
CAGGACTCCCCGCCACCCTCCCACCCTCTGAAAGCTGTTCCTATTGCTGTGGCTGATGAA
GGAGAGTCTGAGTCAGAGGATGATGACCTGAAACCTCGAGGCCTCACGGGCATGAAGAAC
CTCGGGAACTCCTGCTACATGAACGCCGCCCTGCAGGCCCTGTCCAATTGCCCGCCGCTG
ACTCAGTTCTTCTTGGAGTGTGGCGGCCTGGTGCGCACAGATAAGAAGCCAGCCCTGTGC
AAGAGCTACCAGAAGCTGGTCTCTGAGGTCTGGCATAAGAAACGGCCAAGCTACGTGGTC
CCCACCAGTCTGTCTCATGGGATCAAGTTGGTCAACCCAATGTTCCGAGGCTATGCCCAG
CAGGACACCCAAGAGTTCCTTCGCTGCCTGATGGACCAGCTGCACGAGGAGCTCAAGGAG
CCGGTGGTGGCCACGGTGGCGCTGACGGAGGCTCGGGACTCAGATTCGAGTGACACGGAT
GAGAAACGGGAGGGTGACCGGAGCCCATCAGAAGATGAGTTCTTGTCCTGTGACTCGAGC
AGTGACCGGGGTGAGGGTGACGGGCAGGGGCGTGGCGGGGGCAGCTCGCAGGCCGAGACG
GAGCTGCTGATCCCAGATGAGGCGGGCCGAGCCATCTCTGAGAAGGAGCGGATGAAGGAC
CGCAAGTTCTCCTGGGGCCAGCAGCGTACAAACTCGGAGCAAGTGGACGAGGACGCTGAT
GTGGACACTGCCATGGCTGCCCTTGACCAGCCCGCGGAGGCCCAGCCCCCGTCACCACGG
TCCTCCAGCCCCTGCCGGACGCCAGAGCCGGACAATGATGCTCACCTACGCAGCTCCTCT
CGCCCCTGCAGCCCCGTCCACCACCACGAGGGCCATGCCAAGCTGTCTAGCAGCCCCCCT
CGTGCAAGCCCCGTGAGGATGGCACCGTCGTACGTGCTCAAGAAAGCCCAGGTATTGAGT
GCTGGCAGCCGGAGGCGGAAGGAGCAGCGCTACCGCAGCGTCATCTCAGACATCTTTGAC
GGCTCCATTCTCAGCCTCGTGCAGTGTCTCACCTGTGACCGGGTATCCACCACAGTGGAA
```


View online »

ACGTTCCAGGACTTATCACTGCCCATTCCTGGAAAGGAGGACCTGGCCAAGCTCCATTCA
GCCATCTACCAGAATGTGCCGGCCAAGCCAGGCGCCTGTGGGGACAGCTATGCCGCCCAG
GGCTGGCTGGCCTTCATTGTGGAGTACATCCGACGGTTTGTGGTATCCTGTACCCCCAGC
TGGTTTTGGGGGCCTGTCGTCACCCTGGAAGACTGCCTTGCTGCCTTCTTTGCCGCTGAT
GAGTTAAAGGGTGACAACATGTACAGCTGTGAGCGGTGTAAGAAGCTGCGGAACGGAGTG
AAGTACTGCAAAGTCCTGCGGTTGCCCGAGATCCTGTGCATTCACCTAAAGCGCTTTCGG
CACGAGGTGATGTACTCATTCAAGATCAACAGCCACGTCTCCTTCCCCCTCGAGGGGCTC
GACCTGCGCCCCTTCCTTGCCAAGGAGTGCACATCCCAGATCACCACCTACGACCTCCTC
TCGGTCATCTGCCACCACGGCACGGCAGGCAGTGGGCACTACATCGCCTACTGCCAGAAC
GTGATCAATGGGCAGTGGTACGAGTTTGATGACCAGTACGTCACAGAAGTCCACGAGACG
GTGGTGCAGAACGCCGAGGGCTACGTACTCTTCTACAGGAAGAGCAGCGAGGAGGCCATG
CGGGAGCGACAGCAGGTGGTGTCCCTGGCCGCCATGCGGGAGCCCAGCCTGCTGCGGTTC
TACGTGTCCCGCGAGTGGCTCAACAAGTTCAACACCTTCGCGGAGCCAGGCCCCATCACC
AACCAGACCTTCCTCTGCTCCCACGGAGGCATCCCGCCCCACAAATACCACTACATCGAC
GACCTGGTGGTCATCCTGCCCCAGAACGTCTGGGAGCACCTGTACAACAGATTCGGGGGT
GGCCCCGCCGTGAACCACCTGTACGTGTGCTCCATCTGCCAGGTGGAGATCGAGGCACTG
GCCAAGCGCAGGAGGATCGAGATCGACACCTTCATCAAGTTGAACAAGGCCTTCCAGGCC
GAGGAGTCGCCGGGCGTCATCTACTGCATCAGCATGCAGTGGTTCCGGGAGTGGGAGGCG
TTCGTCAAGGGGAAGGACAACGAGCCCCCCGGGCCCATTGACAACAGCAGGATTGCACAG
GTCAAAGGAAGCGGCCATGTCCAGCTGAAGCAGGGAGCTGACTACGGGCAGATTTCGGAG
GAGACCTGGACCTACCTGAACAGCCTGTATGGAGGTGGCCCCGAGATTGCCATCCGCCAG
AGTGTGGCGCAGCCGCTGGGCCCAGAGAACCTGCACGGGGAGCAGAAGATCGAAGCCGAG
ACGCGGGCCGTGTGATCTGCTGGGCTAGTCTCCCCATGTGCCCCACCCCGCGGAAGGCGT
GTTTGTGCCCAGAAGAGAGGCCGGGCTGCTGCAGAACCCCGCCGTGTAAAGAGGCAGAAA
AGTTGGTTTGGTTTGCAGTAACGCTGCAACTAGAAAATATATGCACTTCAGGCTTGTTGA
AACGACCAAGACTCTGTGACGTTAATTTGGGTCTTTGTCCTGGCAGTGCCTCTGCCAGTC
ACTGTCATCGTTGTGTCCCCCACAACTGTCCTCTTGCTAGCTCGGCCCAGCTTTGTCCCT
GGAGCCCGATGCTACCCCTGTCAGACAGAGGCTGCGGCCTG

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006676 unedited
GGGTCGTCTCCTACTTTCGCACGAGGGTTGCGAGTGCATGCTTCTTGCCAGAGGTCTCCA
CTCACTCCAGACCCCTATAGCCCGTCGCTGTCAGCTGTCAACAAAGGATGCGAATGCTGG
CCGCTTTCTGTGGGCTTCGTGTCACCCAGAGGTGAGCCCAGGCCAGGATGGGGGACTCCA
GGGACCTTTGCCCTCACCTTGACTCCATAGGAGAGGTGACCAAAGAGGACTTGCTGCTCA
AATCTAAGGGAACCTGTCAGTCGTGTGGGGTCACCGGACCAAACCTATGGGCCTGTCTGC
AGGTTGCCTGCCCCTATGTTGGCTGCGGAGAATCCTTCGCTGACCACAGCACCATTCATG
CACAGGCAAAAAAGCACAACTTGACCGTGAACCTGACCACGTTCCGACTGTGGTGTTACG
CCTGTGAGAAGGAGGTATTCCTGGAGCAGCGGCTGGCAGCCCCTCTGCTGGGCTCCTCTT
CCAAGTTCTCTGAACAGGACTCCCCGCCACCCTTCCACCCTCTGAAAGCTGTTCCTATTG
CTGTGGCTGATGAAGGAGAGTCTGAGTCAGAAGATGATGACCTGAAACCTCGAGGCCTCA
CGGGCATGAAGAACCTCGGGAACTCCTGCTCATGAACGCCGCCCTGCAAGCCCTGTTCAT
TGCCCGCCGCTGACTCAGNTTTTCTTTGAAGTGTGGCGGGCTGGTGCGCACAGATTAGGA
ACCAGCCCTGTGCAAGAACTACCAAAAGCTGGTCTTTGAAGTCTGCCTTAAGAAACGGCC
AAGCTACGTGGGTCCCCACAGTCTGTTCCAAGGGATCAAAGTTGGCAACCCCATGGTCCC
AGGCTTTGCCCAAGAGGACACCCAAGAGTTCCTTCCCTGCCTGAAGGACCCCTGCACCAG
AACCTAAGAGCCGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006676 unedited
NTTTTTTCTATGGACCCGCGGCCGCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTAAC
ATTTATTCTGTGTTTATTCTGACATTTTGAACACAAACTAGACAGCACAGACATGGGGCC
CGATCCCAGCCTGCACAGAAGCCTCTCTGCGTCGCGACAGTGCAGCGTGCGGCCTCTGGC
TGCAGCGCCGGCTTTCAGAAGGCTGGGGCCAATGCCAGGGGAACCCCAGGCTCAGCAGGG
AGGGAGCAGGATCTGGGACAGAAGATCCGAAAAGTGAGGCCTCAGGGCCTCTGCGGGACC
CACCTGCTGGAATTTCCACCACCACCTGCTTCTACAAAGACTGATAGAAACAAAGACGCA
GTAGTGTGGGGGGTCTGGTCCCAGAGCCCCTTCCCCACCCACGCCCCGTCTGCTTTGATC
CTGATGATGGTCGCACCTCGCCCTGGCGGTTTCTCCAGGGGCTTTGGTGCCTTGCTGTGC
TCAGTGGCTCCCTCCACTCAGCATCCAGAGGCTGCTTCCCAGGATCCACCTGAGCGCTGC
ACCCTGCACAGCCCCCACATCCCTCCAGGCGGGCTCTGCACTGCTGCTGCTGGGAGGAAG
GGAAAGTCTGTCTTCTTTAGCATCAGCTCGGGAAGCTGCCTTTGCCTCAAATGGCCAAGC
TGTGAGGTATCCCTGTTTCATCATCCGGTTCCCTGGTGGGGGCTCAGCAAATTTCCCATG
AAGATGAACTGCTGAACTTCGAGGCAAATTACAGCCAATCCAGGGGGCAGGCTCAGCAGG
ACGCGGGTGTGGGGGACCAGCTGCCTCCAGAAACATCCCCCACTGGCAGAAATCCAACCT
CCTCCTGGTGTTCCAATCAGCAATGAGTCCAGAGTCTTCAGTCTGCAGGAGAAGTGCTGA
GAGCAGCCCGGNACTTCAGAGCCTTCCTGTTGACGCCCAGAN

Restriction Sites: NotI-NotI

ACCN: NM_006676

Insert Size: 4880 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

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_006676.4, NP_006667.2

RefSeq Size: 4511 bp

RefSeq ORF:	2742 bp
Locus ID:	10868
UniProt ID:	Q9Y2K6
Cytogenetics:	9q34.11
Domains:	UCH, zf-UBP, DUSP
Protein Families:	Druggable Genome, Protease
Gene Summary:	This gene encodes a ubiquitin specific processing protease that was first identified as a substrate of the VHL (von Hippel-Lindau disease) protein E3 ubiquitin ligase complex. In addition to being ubiquitinated by the VHL-E3 ligase complex, this enzyme deubiquitinates hypoxia-inducible factor (HIF)-1 alpha and thereby causes increased expression of HIF-1alpha targeted genes which play a role in angiogenesis, glucose metabolism, cell proliferation and metastasis. The enzyme encoded by this gene also regulates G-protein coupled receptor signaling by mediating the deubiquitination of beta-2 adrenergic receptor (ADRB2). This enzyme is a ubiquitously expressed thiolester hydrolase. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jan 2013] Transcript Variant: This variant (1) represents the longest transcript. All three transcript variants encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The extent of this transcript is supported by transcript alignments and orthologous data.