

Product datasheet for **RG226260**

USP20 (NM_001110303) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP20 (NM_001110303) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	USP20
Synonyms:	hVDU2; LSFR3A; VDU2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG226260 representing NM_001110303
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGGGACTCCAGGGACCTTTGCCTCACCTTGACTCCATAGGAGAGGTGACCAAAGAGGACTTGCTGC
 TCAAATCTAAGGGAACCTGTGAGTCGTGTGGGGTACCGGACCAAACCTATGGGCCGTGCTGCAGGTTGC
 CTGCCCTATGTTGGCTGCGGAGAATCCTTTGCTGACCACAGCACCATTATGCACAGGCAAAAAAGCAC
 AACTTGACCGTGAACCTGACCACGTTCCGACTGTGGTGTACGCCTGTGAGAAGGAGGTATTCTGGAGC
 AGCGGCTGGCAGCCCTCTGCTGGGCTCCTTTCCAAGTTCTCTGAACAGGACTCCCCGCCACCCTCCCA
 CCCTCTGAAAGCTGTTCTATTGCTGTGGCTGATGAAGGAGAGTCTGAGTCAGAGGACGATGACCTGAAA
 CCTCGAGGCCCTACGGGCATGAAGAACCTCGGAACTCCTGCTACATGAACGCTGCCCTGCAGGCCCTGT
 CCAATTGCCCGCGCTGACTCAGTTCTTCTGGAGTGTGGCGGCCTGGTGCACAGATAAGAAGCCAGC
 CCTGTGAAGAGTACCAGAAGCTGGTCTCTGAGGTCTGGCATAAGAAACGGCCAAGCTACGTGGTCCCC
 ACCAGTCTGTCTCATGGGATCAAGTTGGTCAACCCAATGTTCCGAGGCTATGCCAGCAGGACACCCAAG
 AGTTCTTCGCTGCCTGATGGACAGCTGCACGAGGAGCTCAAGGAGCCGGTGGTGGCCACGGTGGCGCT
 GACGGAGGCTCGGGACTCAGATTCGAGTGACACGGATGAGAAACGGGAGGGTGACCGGAGCCCATCAGAA
 GATGAGTCTTGTCTGTGACTCGAGCAGTGACCGGGGTGAGGGTGACGGGCAGGGGCGTGGCGGGGCA
 GCTCGCAGGCCGAGACGGAGCTGCTGATCCCAGATGAGGCGGGCCGAGCCATCTCTGAGAAGGAGCGGAT
 GAAGGACCGCAAGTTCTCCTGGGGCCAGCAGCGTACAACTCGGAGCAAGTGACGAGGACGCTGATGTG
 GACACTGCCATGGCTGCCCTTGACGACCAGCCCGGAGGCCAGCCCCGTCACCACGGTCTCCAGCC
 CCTGCCGACGCCAGAGCCGGACAATGATGCTCACCTACGAGCTCCTCTCGCCCTGCAGCCCTCCCA
 CCACCAGGAGGCCATGCCAAGCTGTCTAGCAGCCCCCTCGTGCAAGCCCCGTGAGGATGGCACCGTCTG
 TACGTGCTCAAGAAAGCCAGGTATTGAGTGTGGCAGCCGAGGCGGAAGGAGCAGCGCTACCGCAGCG
 TCATCTCAGACATCTTTGACGGCTCCATTCTCAGCCTTGTGAGTGTCTCACCTGTGACCGGGTATCCAC
 CACAGTGGAAACGTTCCAGGACTTACTGCCCCATTCTGGAAAGGAGGACCTGGCCAAGCTCCATTCA
 GCCATCTACCAGAATGTGCCGGCAAGCCAGGCGCCTGTGGGACAGCTATGCCGCCAGGGCTGGCTGG
 CCTTCATTGTGGAGTACATCCGACGTTTGTGGTATCCTGTACCCCCAGCTGGTTTTGGGGCCTGTCGT
 CACCCTGGAAGACTGCCTTGTGCCTTCTTTGCCGCTGATGAGTAAAGGGTGACAACATGTACAGCTGT
 GAGCGGTGTAAGAAGCTGCGGAACGGAGTGAAGTACTGCAAAGTCTGCGGTTGCCCGAGATCCTGTGCA
 TTCACCTAAAGCGCTTTTCGGCAGGAGGTGATGACTCATTCAAGATCAACAGCCAGTCTCCTTCCCCCT
 CGAGGGGCTCGACCTGCGCCCTTCTTCCCAAGGAGTGACATCCCAGATCACCACCTACGACCTCCTC
 TCGGTCTCTGCCACCACGGCACGGCAGGACAGTGGGCACTACATCGCCTACTGCCAGAAGCTGATCAATG
 GGCAGTGGTACGAGTTTGTGATGACCAGTACGTACACAGAAGTCCACGAGACGGTGGTGCAGAACGCCAGGG
 CTACGTAATCTTACAGGAAGAGCAGCGAGGAGGCCATGCGGGAGCGACAGCAGGTGGTGTCCCTGGCC
 GCCATGCGGGAGCCAGCCTGCTGCGGTTCTACGTGTCCCGGAGTGGCTCAACAAGTTCAACACCTTCG
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 GGCCCCGCGTGAACCACCTGTACGTGTGCTCCATCTGCCAGGTGGAGATCGAGGCACTGGCCAAGCGCA
 GGAGGATCGAGATCGACACCTTCAAGTTGAACAAGGCCTTCCAGGCCGAGGAGTCCGCGGGCGTCTAT
 CTAATGCAATCAGCATGCAGTGGTTCGGGAGTGGGAGGCGTTCGTCAAGGGGAAGGACAACGAGCCCCC
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 ACTACGGGAGATTTTCGGAGGAGACCTGGACCTACCTGAACAGCCTGTATGGAGGTGGCCCCGAGATTGC
 CATCCGCCAGAGTGTGGCGCAGCCGCTGGGCCAGAGAACCTGCACGGGGAGCAGAAGATCGAAGCCGAG
 ACGCGGGCCGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG226260 representing NM_001110303
 Red=Cloning site Green=Tags(s)

MGDSRDLCPHLDSIGEVTKEDLLLKSKGTCQSCGVTGPNLWACLQVACPYVGCGESFADHSTIHAQAKKH
 NLTVNL TTFRLWCYACEKEVFLEQRLAAPLLGSSSKFSEQDSPPSHPLKAVPIA VADEGESESEDDDLK
 PRGLTG MKNLGNSCYMNAALQALSNCPPLTQFFLECGGLVRTDKK PALCKSYQKLVSEVWHKKRPSYVVP
 TSLSHGIKLVNPMFRGYAQQDTQEFRLCLMDQLHEELKEPVVATVALTEARSDSSDTDEKREGDRSPSE
 DEFLSCDSSSDRGE GDGQGRGGSSQAETELLIPDEAGRAISEKERMKDRKF SWGQQR TNSEQVDEDADV
 DTAMAALDDQPAEAQPPSPRSSPCRTPEPDND AHLRSSSRPCSPVHHHEGHAKLSSSPRASPV RMAPS
 YVLKKAQVL SAGSRRRKEQRYRSVISDIFDGSILSLVQCLTCDRVSTTVETFQDLSLPIPKEDLAKLHS
 AIYQNVPAKPGACGDSYAAQGWLA FIVEYIRRFVVSCTPSWFGP VVTLEDCLAFFAADELKGDNMYSC
 ERCKKLRNGVKYCKVLR LPEILCIHLKRF RHEVMYSFKINSHVSFPLEGLDLRPFLAKECTSQITTYDLL
 SVICHG TAGSGHYIAYCQNVINGQWYEFDDQYVTEVHETVVQNAEGYVLFYRKSSEEAMRERQVVS LA
 AMREPSLLRFYVSREWL NKFNTFAEPGPITNQTF L CSHGGIPPHKYHYIDDLV VILPQN VWEHL YNRF GG
 GPAVNHL YVCSICQVEIEALAKRRRIEIDTF IKLNKAFQAEESPGVIYCI SMQWFREWEAFVKGKDNEPP
 GPIDNSRIAQVKGSGHVQLKQGADY GQISEETWTY LNSLYGGPEIAIRQSVAQPLGPENLHGEQKIEAE
 TRAV

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

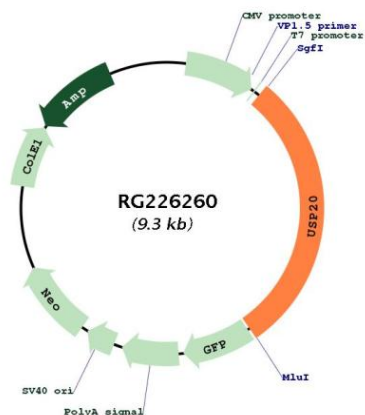
Cloning Scheme:



ACCN: NM_001110303

ORF Size:	2742 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:	<ol style="list-style-type: none">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_001110303.4
RefSeq Size:	4334 bp
RefSeq ORF:	2745 bp
Locus ID:	10868
UniProt ID:	Q9Y2K6
Cytogenetics:	9q34.11
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-1 alpha 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]

Product images:



Circular map for RG226260