

Product datasheet for **RG208051**

USP20 (NM_006676) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP20 (NM_006676) 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:

>RG208051 representing NM_006676
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGGACTCCAGGACCTTTGCCTCACCTTGACTCCATAGGAGAGGTGACCAAAGAGGACTTGCTGC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - **GTTTAA**

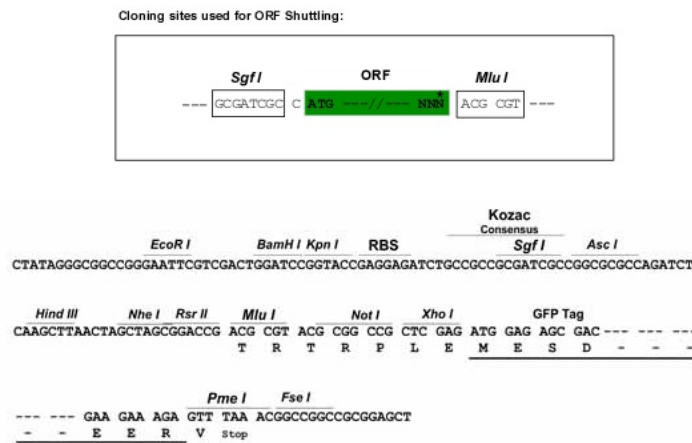
Protein Sequence: >RG208051 representing NM_006676
 Red=Cloning site Green=Tags(s)

MGDSRDLCPHLDSIGEVTKEDLLLKSKGTCQSCGVTGPNLWACLQVACPYVGCGESFADHSTIHAQAKKH
 NLTVNL TTFRLWCYACEKEVFLEQRLAAPLLGSSSKFSEQDSPPSHPLKAVPIA VADEGESESEDDDLK
 PRGLTG MKNLGNSCYMNAALQALSNCPPLTQFFLECGGLVRTDKK PALCKSYQKLVSEVWHKKRPSYVVP
 TSLSHGIKLVNPMFRGYAQQDTQEFRLCLMDQLHEELKEPVVATVALTEARSDSSDTDEKREGDRSPSE
 DEFLSCDSSSDRGE GDGQGRGGSSQAETELLIPDEAGRAISEKERMKDRKFSWGQQR TNSEQVDEDADV
 DTAMAALDQPAEAQPPSPRSSPCRTPEPDNDAHLRSSSRPCSPVHHHEGHAKLSSSPPRASPVRMAPSY
 VLKKAQVL SAGSRRRKEQRYRSV ISDIFDGSILSLVQCLTCDRVSTTVETFQDL SLPIPKEDLAKLHSA
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 RCKKL RNVKYCKVLR LPEILCIHLKRF RHEVMYSFKINSHVSFPLEGLDLRPFLAKECTSQITTYD LLS
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 MREPSLLRFYVSREWLNKFNTFAEPGPITNQTF LCSHG GIPPHKYHYIDDLV VILPQNVWEHL YNRF GGG
 PAVNHL YVCSICQVEIEALAKRRRIE IDTFIKLNKAFQAEESPGVIYCISMQWFREWEAFVKGKDNEPPG
 PIDNSRIAQVKGSGHVQLKQGADY GQISEETWY LNSLYGGGPEIAIRQSV AQPLGPENLHGEQKIEAET
 RAV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

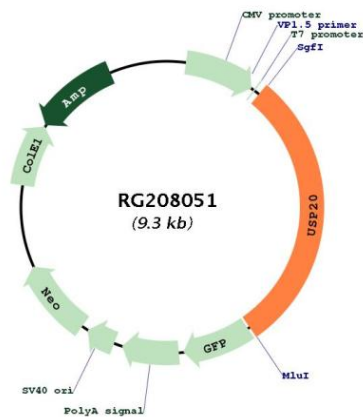


ACCN: NM_006676

ORF Size:	2739 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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_006676.5
RefSeq Size:	4490 bp
RefSeq ORF:	2745 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-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 RG208051