

## Product datasheet for **RG220832**

### USP21 (NM\_001014443) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	USP21 (NM_001014443) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	USP21
Synonyms:	USP16; USP23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG220832 representing NM\_001014443  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCCCAGGCCTCTGAGCACCGCCTGGGCGTACCCGAGAGCCACCTGTTAATATCCAGCCCCGAGTGG  
 GATCCAAGCTACCATTTGCCCCAGGGCCGCGAGCAAGGAGCGCAGAAACCCAGCCTCTGGGCCAAACCC  
 CATGTTACGACCTCTGCCTCCCCGGCCAGGTCTGCCTGATGAACGGCTCAAGAACTGGAGCTGGGACGG  
 GGACGGACCTCAGGCCCTCGTCCAGAGGCCCCCTTCGAGCAGATCATGGGGTCCCTGCCTGGCTCAC  
 CACCCCAACAGTGGCTTTGCCTCTCCCATCTCGGACCACTTAGCCCGTTCCAAGTCTGTGAGCAGTGG  
 GGACTTGGCTCCAATGGGATTGCCTTGGGAGGGCACCGTGGCACCAGGAGCTTGGGGTGCACCTGAGC  
 CGCTTGGCCCTCCGGCTGAGCCACCCACTTTGAGACGTAGCACTTCTCTCCGCCCTAGGGGGCTTTC  
 CTGGACCCCTACCTGTTGAGCATAACGACAGAGCCCTGCTTCCCATGGCTCCTTCCACATGATATC  
 CGCCCGTCTCTGAGCCTTTACTCTGATGACAAGATGGCTCATCACACTCCTTCTGGGCTCTGGT  
 CATGTTGGCCTTCGAAACCTGGGAAACAGTGTCTCCTGAATGCTGTGCTGCAAGTGTCTGAGCAGCACTC  
 GACCTTCTCGGGACTTCTGTCTGAGAAGGACTTCCGGCAAGAGGTGCCTGGAGGAGGCCGAGCCCAAGA  
 GCTCACTGAAGCCTTTCAGATGTGATTGGTGCCTCTGGCACCCCTGACTCCTGCGAAGCTGTGAATCCT  
 ACTCGATCCGAGCTGTCTTCCAGAAATATGTTCCCTCCTTCTCTGGATACAGCCAGCAGGATGCCCAAG  
 AGTTCCTGAAGCTCCTCATGGAGCGCTACACCTTGAATCAACCGCCGAGGCGCCGGGCTCCACCGAT  
 ACTTGCCAATGGTCCAGTTCCTCTCCACCCCGCCGAGGAGGGGCTCTGCTAGAAGAACCTGAGTTAAGT  
 GATGATGACCGAGCCAACCTAATGTGAAACGTTACCTGGAGCGAGAGGACAGCAAGATTGTGGACCTGT  
 TTGTGGCCAGTTGAAAAGTTGTCTCAAGTGCCAGGCTGTGGTATCGCTCCACGACCTTCGAGGTTTT  
 TTGTGACCTGTCCCTGCCATCCCCAAGAAAGGATTTGCTGGGGCAAGGTGTCTCTGCGGGATTGTTTC  
 AACCTTTTCACTAAGGAAGAAGAGCTAGAGTCGGAGAATGCCCCAGTGTGTGACCGATGTGCGCAGAAAA  
 CTCGAAGTACAAAAAGTTGACAGTACAAAGATTCCCTCGAATCCTCGTCTCCATCTGAATCGATTTTC  
 TGCTCCCGAGGCTCCATCAAAAAAGTTGAGTGGTGTAGACTTTCCACTGCAGCGACTGAGCCTAGGG  
 GACTTTGCCAGTGACAAAGCCGGAAGTCTGTATACCAGCTGTATGCCCTTTCGAACCACTCAGGCAGCG  
 TCCACTATGGCCACTACACAGCCCTGTGCCGTGCCAGACTGGTTGGCATGTCTACAATGACTCTCGTGT  
 CTCCCCTGTGAGTAAAACAGGTGGCATCCAGCGAGGGCTACGTGCTGTTCTACCAACTGATGCAGGAG  
 CCACCCCGGTGCCTG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG220832 representing NM\_001014443  
 Red=Cloning site Green=Tags(s)

MPQASEHRLGRTREPPVNIQPRVSKLPLFAPRARSKERRNPASGPNMLRPLPPRPGLPDERLKKLELGR  
 GRTSGPRPRGPLRADHGVPPLPGSPPTVALPLPSRTNLARSKSVSSGDLRPMGIALGGHRTGELGAALS  
 RLALRPEPPTLRRSTSLRRLGGFPGPPTLFSIRTEPPASHGSFHMSARSSEPFYSDDKMAHHTLLLGSG  
 HVGLRNLGNTCFLNAVLQCLSTRPLRDFCLRRDFRQEVPGGGAQELTEAFADVIGALWHPDSCEAVNP  
 TRFRAVFQKYVPSFSGYSQQDAQEFLKLLMERLHLEINRRGRRAPPILANGPVSPRRGGALLEPELS  
 DDDRANLMMWKRYLEREDSKIIVDLFVQQLKSKLKCQACGYRSTTFEVFCDLSLPIPKKGFAGGKVSRLRDCF  
 NLFTKEEELSENAPVCDRCRQKTRSTKLLTVQRFPRILVLHLNRFASRGSIKKSSVGVDFPLQLRSLG  
 DFASDKAGSPVYQLYALCNHSGSVHYGHYALCRCQTGWHVYNDSRVSPVSENQVASSEGVVLFYQLMQE  
 PPRCL

**TRTRPLE** – GFP Tag – V

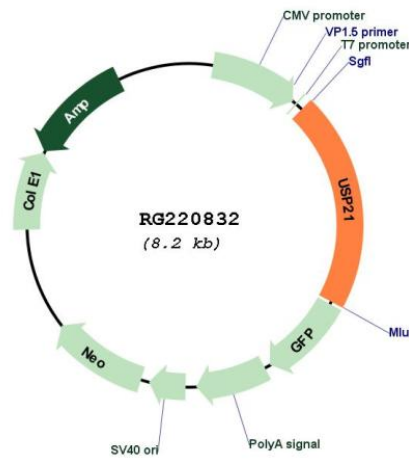
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001014443

ORF Size: 1695 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001014443.3</a>
<b>RefSeq Size:</b>	2358 bp
<b>RefSeq ORF:</b>	1698 bp
<b>Locus ID:</b>	27005
<b>UniProt ID:</b>	<a href="#">Q9UK80</a>
<b>Cytogenetics:</b>	1q23.3
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Gene Summary:</b>	This gene encodes a member of the C19 peptidase family, also known as family 2 of ubiquitin carboxy-terminal hydrolases. The encoded protein cleaves ubiquitin from ubiquitinated proteins for recycling in intracellular protein degradation. The encoded protein is also able to release NEDD8, a ubiquitin-like protein, from NEDD8-conjugated proteins. This gene has been referred to as USP16 and USP23 but is now known as USP21. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]