

Product datasheet for **RG217920**

USP45 (NM_001080481) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	USP45 (NM_001080481) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	USP45
Synonyms:	LCA19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG217920 representing NM_001080481
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

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 GTAAAACTCAGAAAGCCAACATTCATTGAAGCACTTTAAGAGTTCAGAACAGAGCCCCATTGTATTAT
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 TGTTCCAGAATCAAGAGCACTTAGTGACAAGCCTACCTTCTTTTCTATGAAAGAGTATTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG217920 representing NM_001080481
Red=Cloning site Green=Tags(s)

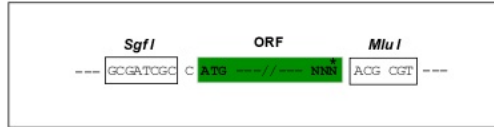
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DRIFIGELTSTVMCEEANISTVKDPFIDISLPIIEERVSKPLLWGRMNKYRSLRETDHRYSGNVTIEN
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ELLMGNNKLLCENCTKNKQKYQEETSFAEKKVEGVYTNARKQLLISAVPAVLILHLKRFHQAGLSLRKVN
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PGLKAADNESAGQWVHVS DTYLQVVPESRALSAQAYLLFYERVL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoR I
BamH I
Kpn I
RBS
Kozac Consensus
Sgf I
Asc I

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

Hind III
Nhe I
Rsr II
Mlu I
Not I
Xho I
GFP Tag

CAAGCTTAAGTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---

Pme I
Fse I

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

ACCN: NM_001080481

ORF Size: 2442 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_001080481.2](#)

RefSeq Size: 6388 bp

RefSeq ORF: 2445 bp

Locus ID: 85015

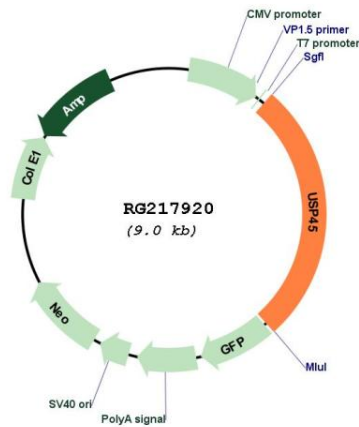
UniProt ID: [Q70EL2](#)

Cytogenetics: 6q16.2

Protein Families: Druggable Genome, Protease

Gene Summary: The protein encoded by this gene is a deubiquitylase that binds ERCC1, the catalytic subunit of the XPF-ERCC1 DNA repair endonuclease. This endonuclease is a critical regulator of DNA repair processes, and the deubiquitylase activity of the encoded protein is important for maintaining the DNA repair ability of XPF-ERCC1. [provided by RefSeq, Sep 2016]

Product images:



Circular map for RG217920