

Product datasheet for **MG226485**

Usp37 (NM_176972) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usp37 (NM_176972) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usp37
Synonyms:	4932415L06Rik; C330008N13Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226485 representing NM_176972
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTCCCTGAAGATCTATGGTCTATCAGAATTCGAAGCATGCAGACTGGGATTACAAAGTGGAAAG
 AAGGGTCCTTTGAAATTGTGAAAAAGACAATAGAGTCAGCCTGCTCGTTCACTACAACACTGGAGGAAT
 TCCAAGAGTGTTCAGCTAAGTCATAACATTAATAATGTGGTACTACGACCCAGTGAATAAAAACAAGC
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 AAATGAGGTTGTTCTAGATGCCGTCCATCAAACAGACTTCATGCAGCTATGAAAGCTTCTCAAGGTTCT
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 GACAATCAGGCCCTTTCAAAAAGAGGAAGTTAGAACTAAAGATGAAATTCATTTGAAAAGTTCTTG
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 TTTGACGCTGACATCAACACCTTTAGATCAGGATTATTAGAAAACCGCACTGAAAAGAGGAAAAGATG
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 CAGACCCTTCAAGAAAATATTTAACCAGCTGTAGAGAAAAGCAGCTGAGTTTGAACAGGCAGAAGAAA
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 TCTTCTGGTGTCACTAACCTGGACAGGTGTAATGTTTTCAAGCCAGACTCCTTCTGCCAAAAGAAGCCTGG
 GTTTTCTCTCAGCCAACTCCTCTGTCTGTTAAAAAAGTGGAGTGAACAGGATTACCGGGCTGGAA
 CAGACCTAGAGTGCCCTTTCTCCCATCAACAGCAGCTGCAGGGATTCTCAACTTGGGAAATACATGC
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 ATGAACTTAAACGCTCTGTGGTCTCAGTCAGAGACTTTGTGATTTGCCAGGCAATGAACAGTACCAGGA
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 GAGCCTTCAAGAGCAAGAGGCTTGGGAACAGAAGGAGATGACGACCTCAAAGGGCTACAGAATTAAGT
 CTTCAAGAGTTTAAACACTCTTTCTGGATTCCCTGGGCTCAGATGAGGACTCTGAAAATGAGGATGTTT
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 TTCCTATCGGCTCATCAGTGTGTCAGTCACATTGGGAGCACTTCTCTCAGGTCATTACATTAGTGAT
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 CCGTGCAGAGTATCGAGATCGCAGCGCTATATCTTCTTATATGCACAAGGAGATCTTTGATGAGTT
 GCTGGAGACAGAAAAACCTCTCAGGCGCTTAGCATGGAGGTGGGAGAGCTGCCCGTCAGGCTTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226485 representing NM_176972
 Red=Cloning site Green=Tags(s)

MSPLKIYGPIRIRSMQTGITKWKEGSFEIVEKDNRVSLLVHYNTGGIPRVFQLSHNIKNVLRPSGIKQS
 RLMLTLQDNSFLSIDKVPKDAEEMRFLDAVHQNRLHAAMKASQGSFGTILGSRTSQKETNRQLSYS
 DNQASSKRGSLKDEIPFRKVLGSPGRGPIKVTGGMAVTRTIPSLTLTSTPLRSGLLNRTKRRKM
 LSGSELTEDYPKENDSSSNKAMTDP SRKYLTS CREKQLSLKQAEENRTSGLLPLQSSSFYGRAGSKDY
 SSGVTNLDRCNVSSQTPSAKRSLGFLPQPTPLSVKRLRCNQDYAGWNRPRVPLSSHQQQLQGF SNLGN
 YMNAIQSLFSLQSFANDLLKQSI PWKIPFNALIRRFANLLIKKD ICNSETK KELLKVKNAISATAER
 FSGYVQNDAHEFLSQCLDQLKEDMEKLNKTKWTEPVLGEENLPDTSATKVFTCPVITNLEFEVQHSIICK
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 LHLKRYSFNVALSLNNKGQQVIIPRFLTLASHCTESTKPPVTLGWSAPVAISRPLRACQMVNSCITSPS
 APSKFFTFKSKSVTSCLDSDSEDELKRSVLSQRLCDLPGNEQYQEDVEKDLKLCRLEPGKAELENSGF
 DRMSEEEVLA AVEISRREASPVLSPEDDKPTSSPDTGFAEDDIPEMPENPDAMEIEKSKTITEPGPAS
 FTEITKDCDENKENTPEGSQGEVDWLQQYDVREREEQELQQALAQSLQEAEWEQKEDDDLKRATELS
 LQEFNNSFLDSLGSDEDSGNEVDVMEYTEAEAEELKRNAETGALPHSYRLISVVS HIGSTSSSGHYISD
 VYDIKKQAWFTYNDLEVSKIQA AAVQSDRDRSGYIFFYMHKEIFDELLETEKTSQALSMEVGRAARQAS

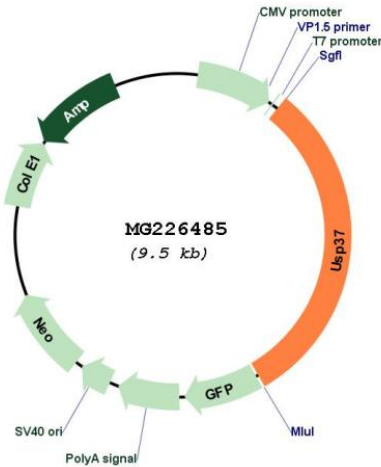
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_176972

ORF Size: 2937 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_176972.4](#), [NP_795946.2](#)

RefSeq Size: 7196 bp

RefSeq ORF: 2940 bp

Locus ID: 319651

UniProt ID: [Q8C0R0](#)

Cytogenetics: 1 C3

Gene Summary: Deubiquitinase that antagonizes the anaphase-promoting complex (APC/C) during G1/S transition by mediating deubiquitination of cyclin-A (CCNA1 and CCNA2), thereby promoting S phase entry. Specifically mediates deubiquitination of 'Lys-11'-linked polyubiquitin chains, a specific ubiquitin-linkage type mediated by the APC/C complex. Also mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains in vitro. Phosphorylation at Ser-628 during G1/S phase maximizes the deubiquitinase activity, leading to prevent degradation of cyclin-A (CCNA1 and CCNA2). Plays an important role in the regulation of DNA replication by stabilizing the licensing factor CDT1.[UniProtKB/Swiss-Prot Function]