

## Product datasheet for **MG226489**

### **Usp4 (NM\_011678) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                     |
| Product Name:             | Usp4 (NM_011678) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                |
| Symbol:                   | Usp4                                    |
| Synonyms:                 | F730026I20Rik; mKIAA4155; Unp           |
| Mammalian Cell Selection: | Neomycin                                |
| Vector:                   | pCMV6-AC-GFP (PS100010)                 |
| E. coli Selection:        | Ampicillin (100 ug/mL)                  |



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**ORF Nucleotide Sequence:**

>MG226489 representing NM\_011678  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAAGGCCGGGGCAGCCGTGAGCGACCGGATGTGGAGACCCAGAAGACGGAGCTCGGAGCCTTGA  
 TGGGGACCACGCTCCAAGTGGGGCGCAGTGGTATCTTATTGACAGCCGGTGGTTCAAGCAGTGGGAAGAA  
 GTATGTGGGCTTTGACAGCTGGGACATGTACAATGTCGGGGAGCATAACCTGTTTCCTGGACCTATTGAC  
 AACTCCGGACTCTTCTCAGATCCTGAGAGTCAGACCTGAAGGAGCACTTAATCGATGAGCTGGACTATG  
 TGCTGGTCCCAGCCGAAGCCTGGAATAAATTGCTGAATTGGTATGGCTGTGTGGAGGGCCAGCAGCCTAT  
 TGTCAAGAAAGTTGTGGAGCATGGCCTGTTTGTCAAGCACTGCAAAGTGGAAAGTGTATTTGCTGGAGCTG  
 AAGCTCTGTGAGAACAGTGACCCACCAATGTGCTAAGTTGCCATTTTAGCAAAGCAGACACCATTGCAA  
 CTATTGAGAAGGAGATGAGGAAGCTCTTCAACATCCCTGCAGAACGTGAAACACGGCTTTGGAACAATA  
 CATGAGCAACACCTATGAGCAGTTGAGCAAGCTAGACAACACTATCCAGGATGCTGGGCTGTACCAGGGT  
 CAGGTGCTAGTAATTGAGCCCCAAAATGAAGATGGCACATGGCCCCGGCAGAGCCTGCAGTCAAAAATCAA  
 GCACTGCACCTAGCAGAAATTTCACTACCTCTTCAAACCATCCGCAAGTCCCTATTGCTCAGTGTCTGC  
 CTCTCTCATTGCAAATGGTATAGCACTAACAGCTCTGGGATGCACAGCTCCGGTGTGACAGGGGTGGA  
 TCTGGCTTCTCTGCTTCTATAATTGCCAGGAGCCCCATCACCTCATATACAGCCTGGCCTCTGTGGAC  
 TTGAAACCTGGGGAACACTTGCTTCATGAACTGCTCTGCAGTGCCTGAGCAACACTGCCCCACTGAC  
 TGAGTACTTTCTCAAAGATGAGTATGAGGCCGAGATCAACCGAGACAACCTCTGGGGATGAAAGGGGAG  
 ATTGACAGGGCCTATGCAGAGCTCATCAAGCAGATGTGGTCTGGAAGGGACACTCACGTGGCACCACGGA  
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 GTCTTCTGGTCTCTGCTGACCCCTCAGTGCAGACCTATCCAGTACCGTGTGACTGTGCCATTGATGGGG  
 CCATTTCTGACCTGTGTGAAGCACTCTCCAAGCTGTCTGGCATTGCTGCAGAAAAATGTTGGTCACTGA  
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 GTAGCTATGAAGGAGATGAAGAGGAAGAAATGGATCATCAAGAGGAAGGAAAAGAGCAGCTTCCGAAGT  
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 AGGCACAAGAGGCTCTTTACCTCAGCCTCGTGAACCTCTGTGGAACCTGTGATATCAATCACTGGCAA  
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 ACCCCTGGTACTGTCCCCTGTAAAGAAGCACCAGGCAACAAAGAAGTTTGACTTGTGGTCTTTGCC  
 CAAGATCCTGGTGGTTCACCTCAAGCGTTTCTCTATAACAGATACTGGCGGGATAAACTTGACACCGTG  
 GTGGAGTCCCAGTCAGAGCTCTGAACATGTCCGAGTTTGTCTGTGACCGGTGAGCAAGGCCTTATGTTT  
 ATGACCTAATTGCTGTGTCATCACTATGGAGCCATGGGGTGGTCACTACACTGCATATGCCAAGAA  
 CAGACTGAACGGGAAATGGTATTACTTTGATGATAGCAGTGTGTCCTGGCCTCTGAGGACCAGATAGTG  
 ACGAAAGCCGCTACGTGTTGTTCTATCAGCGTGGGATGACGAATGCTCCAGCACATCTTCGCTCGGCA  
 GTTTCCCCGTTCTGATGGAGGGTGAAGCTGAGCAGCTCACACCAGGGCATGGGGATGAGGAGGCTTA  
 CAACATGGACACCAAC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226489 representing NM\_011678  
 Red=Cloning site Green=Tags(s)

MAEGRGSRERPDVETQKTELGALMGTTLQRGAQWYLIDSRWFQWKKYVGFDSWDMYVNGEHNLFPGPID  
 NSGLFSDPESQTLKEHLIDELDYVLVPAEAWNKLLNHWYGCVEGQQPIVRKVVEHGLFVKHCKVEVYLLEL  
 KLCENS DPTNVL SCHFSKADTIATIEKEMRKL FNIPAE RETRL WNKYMSNTYEQL SKLDNTIQDAGLYQG  
 QVLVIEPQNE DGTWPRQSLQSKSSTAPSRNFTTSSKPSASPYCSVSASLIANGDSTNSSGMHSSGVSRRGG  
 SGFSASYNQCQEPSPHIQPLGCLGNLGNTCFMNSALQCLSN TAPL TEYFLKDEYEA EINRDNPLGMKGE  
 IAEAYAELIKQMWSGRDTHVAPRMFKTQVGRFAPOFSGYQQQDSQELLAFLDGLHEDLNRVKKKPYLEP  
 KDANGRPDAVVAKEAWENHRLRND SVIVDTFHGLFKSTLVCPECAKVS VTFDPPFCYLTLP LPLKKDRIME  
 VFLVPADPQCRPIQYRVTVPLMGAISDLCEALSKLSGIAAENMVVTDVYNHRFHKIFQMDEGLSHITPRD  
 DIFVYEV CNTSMDGSECITLPVYFREKKS RPSSASSGAVLYGQPLLVSVPKHKL TLESLYQAVCDRISRY  
 IKQPLPDEF LSSPLEPGACNGSRSSYEGDEEEMDHQEEGKEQL SEVEGSGEDDQGDHSESAQKVKGQP  
 RHKRLFTFSLVNSCGTADINSLATDGKLLKLSNRSTLAIDWSETRSLYFDEQESEACEKHL SMSQPQKK  
 KKAVALRECIELFTT METLGEHDPWYPTCKKHQQATKKFDLWSLPKILVVHLKRF SYNRYWRDKLDTV  
 VEFVPRALNMSEFVCDRSARPYVDLIAVSNHYGAMGVGHYTAYAKNRLNGKWYYFDSSVSLASEDQIV  
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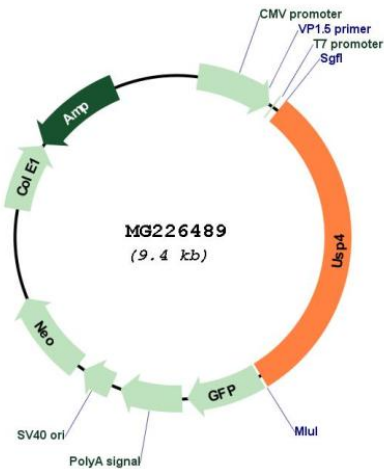
TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_011678

**ORF Size:** 2886 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\\_011678.2](#), [NP\\_035808.2](#)

**RefSeq Size:** 3686 bp

**RefSeq ORF:** 2889 bp

**Locus ID:** 22258

**UniProt ID:** [P35123](#)

**Cytogenetics:** 9 59.25 cM

**Gene Summary:** Deubiquitinating enzyme that removes conjugated ubiquitin from target proteins. Deubiquitinates PDPK1. Deubiquitinates TRIM21. Deubiquitinates receptor ADORA2A which increases the amount of functional receptor at the cell surface. May regulate mRNA splicing through deubiquitination of the U4 spliceosomal protein PRPF3. This may prevent its recognition by the U5 component PRPF8 thereby destabilizing interactions within the U4/U6.U5 snRNP. May also play a role in the regulation of quality control in the ER. [UniProtKB/Swiss-Prot Function]