

## Product datasheet for **MG210112**

### Uvrag (NM\_178635) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Uvrag (NM_178635) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Uvrag
Synonyms:	9530039D02Rik; AI648770; BB124205; Uvrag1; Uvragl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>MG210112 representing NM\_178635  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCTCCTGCGCCTCGCTCGGGGCCGGTGCCTCCACCCCGGGCCGTCGCGCGCTGACGT  
 CCGGTGCCCCCGCGCGGCCCTGCATGTGGAGCTGCCGTCTCAGCAGCGCGCTCCGACATCTCCGGAA  
 CATCGCTGCTCGGAACATTGTTAATAGAAATGGCCATCAGCTTCTGGATACCTACTTCACTCTTCATTTG  
 TGTGATAATGAGAAAATCTTTAAAGAAATTTATAGGAGTGAAGTGATTAAGAATTCCTTGAATCCGACGT  
 GGAGGAGTCTTGACTTTGGAATAATGCCGGATCGTCTGGATACATCTGTGTCTGCTTTGTGGTGAAGAT  
 TTGGGGTGGGAAGGAAGAGGCCCTTTCAGCTGTTGATAGAGTGGAAAGTCTACCTGGATGGCTGAAGTAC  
 TTGGGACAGCAGATCCATGCCCGCAACCAGAATGAAATCATTTTTGGGCTGAATGATGGCTACTACGGTG  
 CTCCTGTGAACACAAGGGTCATCAAACGCACAGAAGAACCCTCCTTCAGGTGGACCAGAAGTGTGTTCCG  
 CAATTCCTACGATGTCTCTCTTTGCTGCGGCTTCATAGAGCCAGTGTGCAATTAACAGACTCAGGTA  
 ACTGTTACAGACTTTGGAAGGAAATTGAAGAAAACCTAAGACTCACATCGACAAGCAATGAGCTGAAAA  
 AAGAAAGTGAATGTCTCGGATTGAAAATTTTGGTCTTCGAAATGAAGTGAAGACAGAAGAAAGCGCT  
 GGGGCGGGAGGTGGCCTTCTGCATAAGCAACAGATGGCTCTACAGGACAAAGGAAGTGCATTTTCCACT  
 GAGCATGGCAAGTCCAGCTGCAGAAGGACTCCCTGAGTGAGCTGAGGAAGGAGTGTACTGCCAAAAGGG  
 AACTCTTTCTGAAGACTAATGCTCAGTTGACCATCCGCTGCAGGCAGCTACTCTCAGAGCTGTCTACAT  
 TTACCCTATTGATTTGAATGAGCACAAGGATTATTTGTATGTGGTGTCAAGTTGCCAATTCCGAGGAC  
 TTCAAAGCAAAAGAGGATGGAAGCATTGCCGTCGCCCTTGTTTACTGACATTTGGTCTCCATGATCT  
 CCTTCTTCTACAAGTACCCCTCAGGTATCCCATAAATCACAAGGGTCCAGATCAACAATCAAAGATAA  
 CATCAACGACAAGCTGACAGAAAAGGAGCGAGAGTTTCCACTGTATCCAAGGGAGGGGAGAAGCTGCAG  
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 CAGACTTGAGGCAAACTTCTCTAACCTGAAAACTTCATGGAGCACGGACTGATGGTCAAGTGTGACAG  
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 TTCTCTGCGGGTATCCCATCACCAGATAAAGTCCATCGCAAGCGGGCCAGCTCAGAGAACGAGAGACTCC  
 AGTACAAAACCCACCTCCAGCTACAATTCAGCATTGACACAGCCCGGGTGGCCATGCCACCTCGGG  
 AGACTCTGAGAGAAAGTCCGCCCTCTGTCTCTCCCTGGACACCTCCCTGGACTTCTCCAAGAAAAAC  
 AAGAAAGCAGGAGTAGACCTGGGCAGCAGTGTGAGCGGAGACCAGGAAACTCGGACTCCGCGCAAGAGC  
 AGGGGGAAGCCCTGCCTGGGCACCTGGCAGCCGTGAATGGCACTGCACTGCCAGCGAGCAGGCTGGCCC  
 TGCCGGCACCCCTGCTGCCAGGCTCGTGCCACCCGGCCCCCTCAGCTGAGCTCTGTGTGAGTGGAGCAA  
 GCAGAGGAAATCATCGGGCTGGAAGCCACAGGCTTACCTCGGGTACCAGCTGGAGGCGCTCAGCTGCA  
 TCCCGGTGGACAGCGCAGTGGCAGTGGAGTGTGACGAGCAGGTGCTGGGGGAGTTTGAGGAGTTCTCTCG  
 CAGGATCTATGCCCTCAGCGAGAAGCTGTCCAGCTTCCGCGGCCCTCGCAGGAGTTCTGACAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210112 representing NM\_178635  
 Red=Cloning site Green=Tags(s)

```
MSSCASLGGPVPLPPPGPSAALTSGAPARALHVELPSQQRRLRHLRNIAARNIVNRNGHQLLDTYFTLHL
CDNEKIFKEFYRSEVIKNSLNPTWRSLDFGIMPDRLDTSVSCFVVKIWWGGKEEAFQLLIEWKVYLDGLKY
LGQQIHARNQNEIIFGLNDGYGAPCEHKGHPNAQKNLLQVDQNCVRNSYDVFSLRLRHRAQCAIKQTQV
TVQRLGKEIEEKLRLTSTSNELKKESECLRLKILVLRNELERQKKALGREVAFLHKQQMALQDKGSFST
EHGKLQKQDLSLSELRKECTAKRELFLKTNLAQLTIRCRQLLSELSYIYPIDLNEHKDYFVCGVKLPNSD
FQAKEDGSI AVALGYTAHLVSMISFFLQVPLRYPIIHKGSRSTIKDNINDKLTEKEREFPlyPKGGKELQ
FDYGVYLLNKNIAQLRYQHGLGTPDLRQTLPNLKNFMEHGLMVRCDRHHSNAIPVPKRQSSFTGGADGG
FSAGIPSPDKVHRKRASSENERLQYKTPPPSYNSALTQPGVAMPTSGDSERKVAPLSSSLDTSDFSKEN
KKAGVDLGSSVSGDHGNSDSGQEQGEALPGHLAAVNGTALPSEQAGPAGTLLPGSCHPAPSAELCCA VEQ
AEEIIGLEATGFTSGDQLEALSCIPVDSAVAVECDEQVLGEFEF SRRIYALSENVSSFRPRSSDK
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_178635

**ORF Size:** 2094 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\\_178635.2](#), [NP\\_848750.2](#)

**RefSeq Size:** 3432 bp

**RefSeq ORF:** 2097 bp

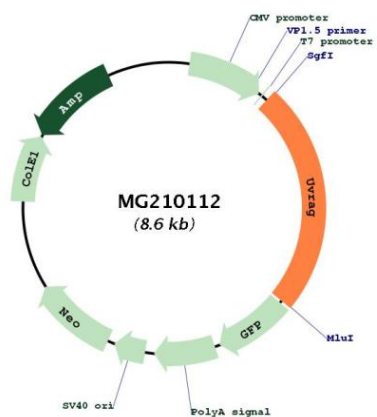
**Locus ID:** 78610

**UniProt ID:** [Q8K245](#)

**Cytogenetics:** 7 E1

**Gene Summary:** Versatile protein that is involved in regulation of different cellular pathways implicated in membrane trafficking. Involved in regulation of the COPI-dependent retrograde transport from Golgi and the endoplasmic reticulum by associating with the NRZ complex; the function is dependent on its binding to phosphatidylinositol 3-phosphate (PtdIns(3)P). During autophagy acts as regulatory subunit of the alternative PI3K complex II (PI3KC3-C2) that mediates formation of phosphatidylinositol 3-phosphate and is believed to be involved in maturation of autophagosomes and endocytosis. Activates lipid kinase activity of PIK3C3. Involved in the regulation of degradative endocytic trafficking and cytokinesis, and in regulation of ATG9A transport from the Golgi to the autophagosome; the functions seems to implicate its association with PI3KC3-C2. Involved in maturation of autophagosomes and degradative endocytic trafficking independently of BECN1 but depending on its association with a class C Vps complex (possibly the HOPS complex); the association is also proposed to promote autophagosome recruitment and activation of Rab7 and endosome-endosome fusion events. Enhances class C Vps complex (possibly HOPS complex) association with a SNARE complex and promotes fusogenic SNARE complex formation during late endocytic membrane fusion. In case of negative-strand RNA virus infection is required for efficient virus entry, promotes endocytic transport of virions and is implicated in a VAMP8-specific fusogenic SNARE complex assembly.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210112