

## Product datasheet for **MG211566**

### Ube2o (BC059193) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ube2o (BC059193) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ube2o
Synonyms:	E2-230K, mKIAA1734, 9630022H21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211566 representing BC059193 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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TGAGAATCATGTCTGCACCCAGATACCCAGTGTCTAGGGACCATTCATGGAAGACCCAGACAAGAA  
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TCAGCCAGCAGAGACCACACAGAGCAGACTGAGACAGCCCTGATGCATCCGACCTCCCAGCGTTAGAC
CAAAGAGGAGGAGAAGAGCTACCGCAGCTTCTGCCTGAGAAGAGCGGTTACCTGACATCGGCTTCCC
CCTCTTCCCACTCTCAAGGGTTTCAAGAGCATCCGGGGGTCTGACACAGTCCGTGCTGCCCTG
CTGGAGGCGGCATGCCGAAAGCACAGAGGACAAG
```

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG211566 representing BC059193

Red=Cloning site Green=Tags(s)

```
MNTEDGAKLYDVCPHVSDSGLFFDDSYGFYPGQVLIQPAKIFSSVQWLSGVKPVLSKSKFRVVVEEVQV
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EKNCAQEGSMKVKRLLKKQVVRIMSCPTDQCPRDHSMEDPKKGEARAGSEIGSASPEEQPDGSAS
PVEMQDEGSEELQETCEPLPPFLLKEGGDDGLHSAEQDADDEAADDTTSSVTSSASSTSSQSGSGTG
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NEFCPGDFVVDKRVQSCPDAVYGVVQSGDHVGRTCMVKWFKL RPSGDDVELIGEEEDSVYDIADHPDF
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```

TRTRPLE - GFP Tag - V

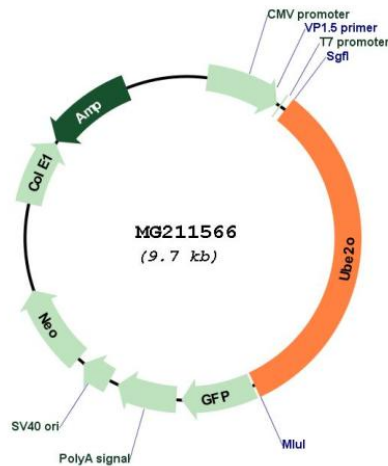
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: BC059193

ORF Size: 3186 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.

<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>	<u><a href="#">BC059193.1</a></u>
<b>RefSeq Size:</b>	4569 bp
<b>RefSeq ORF:</b>	3188 bp
<b>Locus ID:</b>	217342
<b>Cytogenetics:</b>	11 E2
<b>Gene Summary:</b>	E2/E3 hybrid ubiquitin-protein ligase that displays both E2 and E3 ligase activities and mediates monoubiquitination of target proteins. Negatively regulates TRAF6-mediated NF-kappa-B activation independently of its E2 activity. Acts as a positive regulator of BMP7 signaling by mediating monoubiquitination of SMAD6, thereby regulating adipogenesis. Mediates monoubiquitination at different sites of the nuclear localization signal (NLS) of BAP1, leading to cytoplasmic retention of BAP1. Also able to monoubiquitinate the NLS of other chromatin-associated proteins, such as INO80 and CXXC1, affecting their subcellular location. Acts as a regulator of retrograde transport by assisting the TRIM27:MAGEL2 E3 ubiquitin ligase complex to mediate 'Lys-63'-linked ubiquitination of WASHC1, leading to promote endosomal F-actin assembly.[UniProtKB/Swiss-Prot Function]