

Product datasheet for **MG220692**

Ube2o (NM_173755) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ube2o (NM_173755) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ube2o
Synonyms:	9630022H21; B230113M03Rik; E2-230K; mKIAA1734
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG220692 representing NM_173755 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGATCCCAGCGCCCGCACCCGCCAGGCCAGGCCCGCCCGCCCGACCCCGGCCGAGCCC
CCGCCCGCCCGCCCGCCCGCCCGCCGCTACGACTCGGCCCTCAGGGCCGTCTCCGACTCCGGCCC
CGAAGCAGGCTCACAGCGCTGTGTTCTCCACGACCTGGTGTCCGGCCGTTACCGCGGCTCGGTGCAC
TTCGGGCTGGTACGCTCATCCACGGCGAGGACTCGGACTCGGAGGGCGACGATGACGGCCGCGGACGT
CGGGCTGCTCCGAGGCCGGGGCGGGCCACGAGGAGGGCCGGCCAGCCCTCTGCGGCCGGCTACGT
GCGCGTCCAGTGGTACCCGGAGGGCGTCAAGCAGCATGTGAAGGAGACCAAGCTGAAACTGGAGGACCGC
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CCAGCACATCTGGCCCTCATGTATGGAGACTATATCGCCTATGACTGCTGGCTGGGGAAGGTCTATGAC
TTGAAGAACCAGATCATCCTCAAGTTGTCTAATGGTGCCAGGTGCTCCATGAACACAGAAGATGGTGCCA
AACTCTACGATGTCTGCCTCACGTCAGCGACTCGGGTCTCTTTTGTGACTCTTATGGCTTCTACCC
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GCTGCACTCGGCAGAGCAGGACGCAGATGATGAGCGGCTGACGATACAGATGACACCAGCTCTGTGACC



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TCCTCCGCCAGCTCTACTACCTCCTCCCAGAGTGGCAGTGGCACTGGTCGTAAAAAGAGCATTCCCTTGT
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TTCATCAAGAGCATCCGGGGGCTCTGACACAGTTCGTGCTGCCTGCTGGAGGCGGGCATGCCGAAA
GCACAGAGGACAAG

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG220692 representing NM_173755
 Red=Cloning site Green=Tags(s)

MADPAAPAPAQAQAAAAPTPAAAPAAAAPPPAPATDSASGPSSDSGPEAGSQRLLFSHDLVSGRYRGSVH
 FGLVRLIHGEDSDSEGGDDDRGSSGCSEAGGAGHEEGRASPLRRGYVVRVQWYPEGVKQHVKETKLEDR
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 VFPAKVPEAKIAWECEPEKNCAQGEKMAKKVKRLLKKQVVRIMSCPTDTCPRDHMEDPDKKGEARAGS
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 EEEDVSVYDIADHPDFRFRRTDIVIRIGNTEDGALPKEDEPSVGQVARVDVSSKVEVWADNSKTIILPQ
 HLYNIESEIEESDYDSVEGSSSGASSDEWEDSDSWETDNLVDDEHPKIEELAAILPAEQPTAPEEDKG
 VVISEEAATAAIQAVAMAAPVAGLMEKAGKDGPPKSFRELKEAIKILESLKNMTVEQLLTGSPTSPTVE
 PEKPTREKKFLDDIKKLQENLKKTLDNVAIAEEKMEAVPDERKEEKPEVQSPVKAEWSETPVLCCQC
 GGRPGVTFTSAKGEVFSVLEFAPSNHSFKKIEFQPPEAKKFFSTVRKEMALLATSLPDGIMVKTFFEDRMD
 LFSALIKGPTRTPYEDGLYLFDIQLPNIYPAVPPHFCYLSQCSGRLNPPLYDNGKVCVSLLTGWIGKGT
 RWTSSKSSLLQVLSIQGLILVNEPYNEAGFSDRGLQEGYENSRCYNEMALIRVVQSMTQLVRRPPEVF
 EQEIRQHFVSGGWRLVNRIESWLETHAMQERAQVMPNGALKSSSLEPMAAAELSDSGREEPEDVGMAPG
 EASQGSDEGGAQGPASASRDHTEQTETAPDASAPPSVRPKRRRKSYSRFLPEKSGYPDIGFPLFPLSKG
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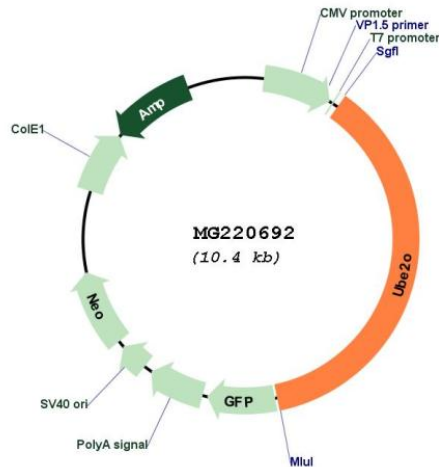
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_173755

ORF Size: 3864 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_173755.3](#), [NP_776116.2](#)

RefSeq Size: 5192 bp

RefSeq ORF: 3867 bp

Locus ID: 217342

UniProt ID: [Q6ZPJ3](#)

Cytogenetics: 11 E2

Gene Summary:

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]