

Product datasheet for **MC221162**

Ubc (NM_019639) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ubc (NM_019639) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ubc
Synonyms:	2700054O04Rik; A1194771; Rps27a; TI-225; Uba52; Ubb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221162 representing NM_019639
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGATCTTTGTGAAAACCTTAAGTGGTAAGACCATCACCTGGAGGTCGAGCCAGTGACACCATTG
 AGAATGTCAAGGCAAAGATCCAGGACAAGGAGGGCATCCCCCTGACCAGCAGAGGCTGATCTTTGCAGG
 CAAGCAGCTGGAAGATGGCCGCACCCTGTCAGACTACAACATCCAGAAAGAGTCCACCCTGCACCTGGTC
 CTTGCGCTCAGAGGTGGCATGCAGATCTTTGTGAAGACCCTGACAGGCAAGACCATCACCTGGAGGTGCG
 AGCCAGTGACACCATAGAGAATGTCAAGGCAAAGATCCAGGACAAGGAGGGCATCCCCCTGACCAGCA
 GAGGCTGATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAGACTACAACATCCAGAAAGAG
 TCCACCCTGCACCTGGTCCTTCGCCTCAGAGGTGGGATGCAGATCTTTGTGAAGACCCTGACAGGCAAGA
 CCATCACCTGGAGGTCGAGCCAGTGACACCATAGAGAATGTCAAGGCAAAGATCCAGGACAAGGAGGG
 CATCCCCCTGACCAGCAGAGGCTGATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAGAC
 TACAACATCCAGAAAGAGTCCACCCTGCACCTGGTCCTTCGCCTCAGAGGTGGCATGCAGATCTTTGTGA
 AGACCCTGACAGGCAAGACCATCACCTGGAGGTCGAGCCAGTGACACCATTGAGAATGTCAAGGCAAA
 GATCCAGGACAAGGAGGGCATCCCCCTGACCAGCAGAGGCTGATCTTTGCAGGCAAGCAGCTGGAAGAT
 GGCCGCACCCTGTCAGACTACAACATCCAGAAAGAGTCCACCCTGCACCTAGTCCTTCGCCTCAGAGGTG
 GGATGCAGATCTTTGTGAAGACCCTGACAGGCAAAACCATCACCTGGAGGTCGAGCCAGTGACACCAT
 TGAGAATGTCAAGGCAAAGATCCAGGACAAGGAGGGCATCCCCCTGACCAGCAGAGGCTGATCTTTGCA
 GGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAGACTACAACATCCAGAAAGAGTCCACCCTGCACCTGG
 TCCTTCGCCTCAGAGGTGGGATGCAGATCTTTGTGAAGACCCTGACAGGCAAGACCATCACCTGGAGGT
 CGAGCCAGTGACACCATAGAGAATGTCAAGGCAAAGATCCAGGACAAGGAGGGCATCCCCCTGACCAG
 CAGAGGCTGATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAGACTACAACATCCAGAAAG
 AGTCCACCCTGCACCTGGTCCTTCGCCTCAGAGGTGGCATGCAGATCTTTGTGAAGACCCTGACAGGCAA
 GACCATCACCTGGAGGTCGAGCCAGTGACACCATAGAGAATGTCAAGGCAAAGATCCAGGACAAGGAG
 GGCATCCCCCTGACCAGCAGAGGCTGATCTTTGCAGGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAG
 ACTACAACATCCAGAAAGAGTCCACCCTGCACCTGGTCCTTCGCCTCAGAGGTGGGATGCAGATCTTTGT
 GAAGACCCTGACAGGCAAGACCATCACCTGGAGGTCGAGCCAGTGACACCATAGAGAATGTCAAGGCA
 AAGATCCAGGACAAGGAGGGCATCCCCCTGACCAGCAGAGGCTGATCTTTGCAGGCAAGCAGCTGGAAG
 ATGGCCGCACCCTGTCAGACTACAACATCCAGAAAGAGTCCACCCTGCACCTGGTCCTTCGCCTCAGAGG
 TGGCATGCAGATCTTTGTGAAGACCCTGACAGGCAAGACCATCACCTGGAGGTCGAGCCAGTGACACC
 ATAGAGAATGTCAAGGCAAAGATCCAGGACAAGGAGGGCATCCCCCTGACCAGCAGAGGCTGATCTTTG
 CAGGCAAGCAGCTGGAAGATGGCCGCACCCTGTCAGACTACAACATCCAGAAAGAGTCCACCCTGCACCT
 GGTCTTCGCCTCAGAGGTGGCATGCAGATCTTTGTGAAGACCCTGACAGGCAAGACCATCACCTGGAC
 GTCGAGCCAGTGTTACCACCAAGAAGGTCAAACAGGAAGACAGACGTACCTTCCTCACCACAGTATCTA
 AAAAGAGCCCTCCTTGTGCTTGTCTTGGGT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_019639
Insert Size: 2205 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_019639.4](#), [NP_062613.3](#)

RefSeq Size: 2424 bp

RefSeq ORF: 2205 bp

Locus ID: 22190

UniProt ID: [P0CG50](#)

Cytogenetics: 5 64.18 cM

Gene Summary:

Ubiquitin: Exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell-cycle regulation; Lys-29-linked is involved in lysosomal degradation; Lys-33-linked is involved in kinase modification; Lys-48-linked is involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, DNA-damage responses as well as in signaling processes leading to activation of the transcription factor NF-kappa-B. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling.[UniProtKB/Swiss-Prot Function]