

Product datasheet for **RN211933**

Uba1 (NM_001014080) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Uba1 (NM_001014080) Rat Untagged Clone
Tag: Tag Free
Symbol: Uba1
Synonyms: Ube1x
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN211933 representing NM_001014080
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGCTCGCCGCTGTCCAAGAAACGTCGCGTGTCCGGCCGATCCAAAGCCAGGTTCTAACTGCT
CCTCTGCACAGTCAGTGTGTCCGAAGTGTCTTCAGTGCCAACCAACGGAATGGCGAAGAACGGCAGTGA
AGCAGACATAGACGAGAGCCTTTACTCCGGCAGCTGTACGTTTTGGGCCATGAGGCAATGAAAATGCTC
CAGACATCCAGTGTCTCGTCTCAGGCTTGCGGGGCTTAGGTGTGAGATTGCTAAGAACATCATCCTTG
GTGGGGTCAAGGCTGTACCCCTACATGACCAAGGCACTACACAGTGGGCTGATCTCTCTCCAGTTTTA
CCTTCGGGAGGAGGACATTGGTAAAAATCGAGCTGAGGTATCCCAGCCCCGACTTGCTGAACTCAACAGC
TATGTACTGTACTGCCTACACTGGGCCTCTTGTGAAGACTTCCTTAGTGGTTCCAGGTGGTGGTCC
TTACCAACAGCCCCCTGGAAGAACAGCTTCGAGTGGGTGAGTTCTGTCTAGCCGTGGCATCAAGCTAGT
GGTGGCAGATACAAGAGGCTATTTGGCAACTTTCTGTGATTTGGAGAGGAAATGGTTCTCACAGAT
TCCAATGGGGAGCAGCCACTCAGTGTATGGTTCAATGGTCACCAAGGACAACCCCGGTGTGGTTACCT
GCCTTGATGAGGCCGACATGGCTTTGAGACTGGTGACTTCGTCATTCTCAGAAGTACAGGGCATGGT
CCAACCTAATGGATGTCAGCCCATAGAGATCAAAGTGCTGGGTCTTATACTTTTAGTATCTGTGACACC
TCCAACCTCTCTGACTACATCCGTGGAGGCATCGTCAGCCAGGTCAAAGTACCTAAAAAGATTAGCTTTA
AATCCTTGCCAGCATCACTGGCAGAGCCTGACTTTGTGATGACTGACTTTGCCAAGTATTCTCGCCCTGC
CCAACCTGCACATTGGCTTTCAAGCTCTGCACCAATTCTGTGCTCAGCACAACCGACCACCTCGACCACGA
AATGAGGAAGATGCAACAGAAGTGGTGACCCTAGCTCAGGCTGTGAATGCTCGGTCCCCACCTGCAGTAC
AACAGGACAACGTGGATGAAGACCTTATCGGAAGCTAGCTTATGTTGCTGCTGGGGACCTGGCACCTAT
AAATGCTTTTATTGGGGCCTCGCTGCCAGGAAGTCATGAAGGCCTGTTCTGAAAAGTTTATGCCATC
ATGCAGTGGTTGACTTTGATGCTCTTGAATGTCTCCAGAGGACAAAGAGGCTCTGACAGAGGACAAGT
GCCTCCCACGTGAGAACCCTTATGATGGGCAGGTAGCTGTATTTGGCTCAGACCTTCAAGAGAAGCTGGG
CAAGCAAAAGTACTTCTGGTGGGTGCAGGGGCCATTGGCTGTGAATTGCTCAAGAACTTTGCCATGATT
GGGTTAGGCTGTGGAGAGGGTGGAGAGGTCGTGGTCACAGACATGGACACCATTGAGAAATCGAATCTGA



ACCGACAGTTTCTTTCCGGCCCTGGGATGTCACGAAGTTAAAGTCTGACACGGCCGCTGCAGCTGTGCG
 ACAGATGAATCCTTACATCCAGGTGACAAGCCACCAGAACCCTGTAGGCCCTGACACGGAGCGCATCTAT
 GATGATGATTTTTTCCAAAATTTGGATGGTGTGGCCAATGCACTGGACAATGTAGATGCCCGGATGTACA
 TGGATCGCCGCTGTGTACTATCGGAAGCCACTGCTAGAGTCTGGCACACTGGGCACAAAGGGCAATGT
 GCAGGTGGTGTACCCCTTCTGACAGAATCATACAGCTCTAGCCAGGACCACCAGAGAAATCCATCCCC
 ATTTGTACCCTGAAAACTTTCCCAATGCCATCGAACACACTCTACAGTGGGCCCGGGATGAATTTGAAG
 GCCTTTTCAAGCAGCCAGCAGAAAATGTTAATCAGTACCTCACAGACTCCAAATTTGTGGAGCGGACATT
 GCGGCTGGCGGGTACCCAGCCATTGGAGGTGCTGGAGGCTGTGCAGCGCAGCCTGGTGTGCAGCGACCA
 CAGACTTGGGGCGACTGTGTGACCTGGGCTGCCACCACTGGCACACCCAGTACTGTAACACATACGGC
 AGCTGTGCACAACCTTCTCCCGACCAGCTCACCAGCTCAGGGGCCCTTTCTGGTCTGGACCCAAACG
 ATGTCCACACCCTTACTTTTGTGTTAAACAATACATTGCATCTGGATTATGTGATGGCTGCTGCCAAC
 CTTTTTGGCCAGACCTATGGGTTGACTGGCTCCAAGACCAGCTGCTGTGGCTCACTCTACAGTCAG
 TACAAGTCCAGAGTTCACCCCAAGTCTGGTGTCAAGATCCATGTTTCTGACCAGGAGTTCAGAGCGC
 CAATGCCTCTGTTGATGACAGCCGTCTCGAGGAGCTCAAAGCCACACTGCCGAGCCAGACAAGTTACCT
 GGATTTAAGATGTACCCATTGATTTTAAAAGGACGATGACAGCAATTTCCACATGGATTTTCATTGTGG
 CTGCATCTAATCTTCGGGCCGAAAATATGATATTTCCCTGCAGACCGGCACAAGAGCAAGCTGATCGC
 AGGGAAGATCATCCAGCTATCGCCACAACCACAGCTGCTGTGGTTGGCCTTGTGTGTCTGGAACCTAC
 AAGGTAGTTTCAGGGGCACCAACAACCTTGATTCCTACAAAATGGTTTCTGAATTTGGCCCTGCCCTTCT
 TTGGGTTTTCGGAACCTCTGCTGCGCCTGTCCACAGTACTATAATCAAGAGTGGACATTGTGGGATCG
 CTTTGAAGTACAAGGGCTACAGCCTAATGGTGAGGAGATGACTCTCAAGCAGTTCCTTGATTACTTTAAG
 ACGGAGCACAATTAGAGATCACCATGCTGTCCAGGGTGTGCCATGCTCTATTCTTTCTCATGCCAG
 CTGCTAAGCTCAAGGAACGGTTGGATCAGCCGATGACAGAGATTGTGAGCCGAGTGTCAAAGAGAAAAGCT
 GGGCCGCATGTGCGTGCCTGCTGAGCTGTGCTGCAACGATGAAAGTGGCGAGGACGTGAGGTC
 CCCTATGTACGATATAACAATTCGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_001014080

Insert Size:

3177 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001014080.1, NP_001014102.1

RefSeq Size:

3618 bp

RefSeq ORF: 3177 bp

Locus ID: 314432

UniProt ID: [Q5U300](#)

Cytogenetics: Xq11

Gene Summary: Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin-proteasome system. Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP. Essential for the formation of radiation-induced foci, timely DNA repair and for response to replication stress. Promotes the recruitment of TP53BP1 and BRCA1 at DNA damage sites.[UniProtKB/Swiss-Prot Function]