

Product datasheet for RR211933

Uba1 (NM_001014080) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Uba1 (NM_001014080) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Uba1
Synonyms:	Ube1x
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR211933 representing NM_001014080 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGCTCGCCGCTGTCCAAGAACGTCGCGTGTCCGGCCGATCCAAAGCCAGGTTCTAACTGCT
CCTCTGCACAGTCAGTGTGTCCGAAGTGTCTTCAGTGCCAACCAACGGAATGGCGAAGAACGGCAGTGA
AGCAGACATAGACGAGAGCCTTTACTCCGGCAGCTGTACGTTTTGGGCCATGAGGCAATGAAAATGCTC
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CCTTCGGGAGGAGGACATTGGTAAAAATCGAGCTGAGGTATCCCAGCCCCGACTTGCTGAACTCAACAGC
TATGTACTGTACTGCCTACACTGGCCCTCTTGTGAAGACTTCCTTAGTGGTTCCAGGTGGTGGTCC
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TCCAATGGGAGCAGCCACTCAGTGTATGGTTCAATGGTCACCAAGGACAACCCCGGTGTGGTTACCT
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CCAACCTAATGGATGTCAGCCCATAGAGATCAAAGTGTGGTCTTATACTTTTAGTATCTGTGACACC
TCCAACCTCTCTGACTACATCCGTGGAGGCATCGTCAGCCAGGTCAAAGTACCTAAAAAGATTAGCTTTA
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 AAGGTAGTTTACGGGGCACCAACAACCTTATTCTCAAAAATGGTTTCTGAATTTGGCCCTGCCCTTCT
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 CTTTGAAGTACAAGGGCTACAGCCTAATGGTGAGGAGATGACTCTCAAGCAGTTCCTTGATTACTTTAAG
 ACGGAGCACAATTAGAGATCCCATGCTGTCCAGGGTGTGCCATGCTCTATTCTTCTCATGCCAG
 CTGCTAAGCTCAAGGAACGGTTGGATCAGCCGATGACAGAGATTGTGAGCCGAGTGTCAAAGAGAAAAGCT
 GGGCCGCATGTGCGTGCCTGCTTGGAGCTGTGCTGCAACGATGAAAGTGGCGAGGACGTGAGGTC
 CCCTATGTACGATATAACAATTCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR211933 representing NM_001014080

Red=Cloning site Green=Tags(s)

MSSSPLSKKRRVSGPDPKPGSNCSAQSVLSEVSSVPTNGMAKNGSEADIDESLYSRQLYVLGHEAMKML
 QTSSVVLVSLRGLGVEIAKNIILGGVKAIVLHDQGTQWADLSSQFYLREEDIGKNRAEVSQPRLAELNS
 YVPVTAYTGPLVEDFLSGFQVVVLTNSPLEEQLRVGEFCHSRGIKLVVADTRGLFGQLFCDFGEEMVLT
 SNGEQPLSAMVSMVTKDNPVVTCLDEARHGFETGDFVSFSEVQGMVQLNGCQPIEIKVLGPYTFSDI
 SNFSDYIRGGIVSQVKVPKKISFKSLPASLAEPDFVMTDFAKYSRPAQLHIGFQALHQFCAQHNRPPR
 NEEDATELVTLAQAVNARSPPAVQQDNVDEDLIRKLAYVAAGDLAPINAFIGGLAAQEVKACSGKFMPI
 MQWLYFDAL ECLPEDKEALTEDKCLPRQNRVDGQVAVFGSDLQEKLGKQKYFLVGAGAIGCELLKNFAMI
 GLGCGEGEVVVTDMDTIEKSNLNRQFLFRPVDVTKLKSDTAAA AVRQMNPIQVTS HQNRVGPDTERIY
 DDDFFQNL DGVANALDNVDARMYMDRRCVYYRKP LLESGTLGTKGNVQVVIPFLTESYSSSQDPPEKSIP
 ICTLKNFPNAIEHTLQWARDEFGLFKQPAENVNQYL TDSKFVERTLRLAGTQPLEVLEAVQRSLVLRP
 QTWGDCVTWACHHWHYQYCNIRQLLHNFPPDQLTSSGAPFWSGPKRCPHPLTFD VNNTLHLDYVMAAN
 LFAQTYGLTGSQDRAAVASLLQSVQVPEFTPKSGVKIHVSDQELQSANASVDDSRLEELKATLPSDKLP
 GFKMYPIDFEKDDSNFHMDFIVAASNLAENYDISPADRHKSKLIAGKIIPAIATTTAAVVGLVCLELY
 KVVQGHQQLDSYKNGFLNLALPFFGFSEPLAAPRHQYYNQEWTLWDRFEVQGLQPNGEEMTLKQFLDYFK
 TEHKLEITMLSQGVSMLYSFFMPAAKLERLDQPMTEIVSRVSKRKLGRHVRLVLELCCNDESGEDVEV
 PYYRYTIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	<u>NM_001014080.1, NP_001014102.1</u>
RefSeq Size:	3618 bp
RefSeq ORF:	3177 bp
Locus ID:	314432
UniProt ID:	<u>Q5U300</u>
Cytogenetics:	Xq11
MW:	117.8 kDa
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]