

Product datasheet for **SC113185**

UBQLN4 (NM_020131) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UBQLN4 (NM_020131) Human Untagged Clone
Tag:	Tag Free
Symbol:	UBQLN4
Synonyms:	A1U; A1Up; C1orf6; CIP75; UBIN
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC113185 sequence for NM_020131 edited (data generated by NextGen Sequencing)

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ATGGCGGAGCCGAGCGGGGCCGAGACGAGGCCCCCATTCGGGTCAACGTCAGACCCCC
AAGGACAAGGAGGAAATTGTGATCTGCGATCGAGCCTCGGTCAAGGAGTTCAAAGAGGAA
ATCTCCCGGAGGTTTAAGGCTCAGCAGGATCAGCTGGTCTGATCTTCGACAGGCAAGATC
CTCAAGGATGGGACACACTGAACCAGCACGGAATCAAGGACGGGCTCACTGTCCATCTG
GTCAATCAAGACCCCTCAGAAGGCTCAAGATCCAGCTGCTGCCACTGCTTCTTCCCCCTCC
ACACCTGACCCTGCCTCAGCACCCCTCCACCACGCCTGCTTCAACCGCCACCCCTGCCAG
CCCTCCACCTCTGGCAGTGCCTCTTCAGATGCTGGCAGTGGAAGCCGGAGGAGCAGTGGT
GGGGGGCCCTCTCCGGGGCTGGGGAGGGATCCCCAGTGCTACTGCGTCCATACTCTCT
GGCTTTGGGGCATCCTGGGGCTGGGCAGCCTAGGCCTGGGCTCTGCCAACTTCATGGAG
CTGCAGCAGCAGATGCAGCGGCAGCTGATGTCCAATCCTGAGATGCTGTACAGATCATG
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GCCAACCCCCAGATGCAGCAGTTGATGGAGCGGAACCCTGAGATCAGCCACATGTCTAAT
AACCTGAACCTCATGAGGCAGACAATGGAGCTTGCTCGGAATCCAGCCATGATGCAAGAG
ATGATGCGGAACCAAGACCGGGCCCTGAGCAACCTTGAGAGCATCCCTGGAGGGTATAAT
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CCCTCAGCAGGCAGCAACGCAGGGTCTACGCCCAGGCCCCCACTTCTCACCAGCCACG
CCAGCCACATCTTCTCAACAGGGGCTTCCAGCGCCAGCAGCAACTCATGCAGCAGATG
ATCCAGCTTTTGGCTGGAAGTGGAACTCACAGGTGCAGACGCCAGAAGTGAGATTTAG
CAGCAGCTGGAGCAGCTCAACTCCATGGGCTTCATCAATCGTGAGGCTAACCTGCAGGCC
CTGATTGCCACAGGAGGGGACATCAACGCAGCTATCGAGAGACTGCTGGGCTCCAGCTC
TCCTAA

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Clone variation with respect to NM_020131.3
1023 g=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_020131 unedited
 CCAATTCCTCCCGCCGTTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATA
 AGCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTGCAGCGGCC
 GCGAATTCGGCACGAGGGGCTGGCGGGCGGCGGTGGCGGCGGCGCATGGCGGAGCCG
 AGCGGGGCTGAGACGAGGCCCCCATTGCGGTACCGTCAAGACCCCAAGGACAAGGAG
 GAAATTGTGATCTGCGATCGAGCCTCGGTCAAGGAGTTCAAAGAGGAAATCTCCCGGAGG
 TTAAAGGCTCAGCAGGATCAGTGGTCTGATCTTCGAGGCAAGAGCCTCAAGGATGGG
 GACACACTGAACGAGCACGGAATCAAGGACGGGCTCACTGTCCATCTGGTCATCAAGACC
 CCTCAGAAGGCTCAAGAGCCAGCTGCTGCCACTGCTTCTTCCCCCTCCACACCTGACCT
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 GGCAGTGCCTCTTCAGATGCTGGCAGTGAAGCCGGAGGAGCAGTGGTGGGGGGCCCTCT
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 ATCCTGGGGCTGGGCAGCCTAGGCTGGGCTCTGCCAATTTCATGGAGCTGCAGCAGCAG
 ATGCAGCGGCTAGCTGATGTCCAATCCTGAGATGCTGTACAGATCATGGAGAGCCCCCT
 GGTCCAGATCATGATGTCTAGCCCTGATCTGATGCGTCCATGGATTATGGCCACCTCCA
 GATGCAGCAGTTGATGGGAGCGGAGCCCTGAGATCAGTCCATGCTCAATAGCCCTGACTC
 ATGAGCAACATTGGAGCTTGCTCGNCATCAGCCTGAGCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_020131 unedited
 CGGTCTTACTATGNNACCGCGGCCCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTGT
 TTTTTTTTTTTTCCAACAAAAACCACGCCATTTATTTACAAAGGCCAGTGTGGGAGCTGG
 GGGAGGCAGGGAGGGAAGCCACACAGACATCTTCTCTGGACTGCTTGGGACCTTTCCC
 ACTTGGAGCAAACTCTGTTCTCTTGCCGTCATTTCTCAGCCATGGGGTCGGTCTCTCA
 AGCAGCTGGGCCAAGTAGGAGAGGGAAGAGGTGATATGAGCCTCCTCTGTGCTCTGACAG
 AGAAATGTCCAATTCCAGATCAAAGGCATTATTGCCACCCTCTCCTCTCCTCTCAAAG
 AAAACTTTCTGGCCTGGAGGGAAATAGTTAAGAACTGAAAGGCCAGGGGCTCTGGAGGAA
 AAAAAACCCTCTACTATTTCCACAAGGCAGTGAGGGGTGATAAGGGTGCTAGTCACAGCC
 CTGACAGCTTCAGAAAGGTACCCACATTACCTCTGGGGTACCCAGCATCCCGAGCCCCA
 AGGGACCTAGCTCTCCCCGATATATTTCTGCAATGGACTGACCCTTTTACCCCTTGT
 CTCCTGGTGTGGGAGAGCACTCTTGACCCCAAACACAGGGGATCCCCTTTCCACCCCA
 CTTTAGAGAGGTTGCCACCTGTGGGATACCCAAAGCGCCTCCCCCTTATTTAAAAA
 CCCCACCCCTTTATTGTTTTTTGAGGGGGGTTCAACATCCTGGGGGCCCGGGGGAC
 CCCACCCAAAACCTGTGGGCCCCGGGAAAAGTGTGGTGGGGTGGCCTTTTAAACACCAAT
 TGCTTTGGGAACCTAAAACCCACTTTTACCCCTTGGGGGGCGGGGGCGCTAATCTCA
 TTGGGCGCTCTTTTCACTTAAAA

Restriction Sites:

NotI-NotI

ACCN:

NM_020131

Insert Size:

4000 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:	<u>NM_020131.3, NP_064516.2</u>
RefSeq Size:	3545 bp
RefSeq ORF:	1806 bp
Locus ID:	56893
UniProt ID:	<u>Q9NRR5</u>
Cytogenetics:	1q22
Domains:	UBA, UBP, ST1
Protein Families:	Druggable Genome
Gene Summary:	Regulator of protein degradation that mediates the proteasomal targeting of misfolded, mislocalized or accumulated proteins (PubMed:15280365, PubMed:27113755, PubMed:29666234, PubMed:30612738). Acts by binding polyubiquitin chains of target proteins via its UBA domain and by interacting with subunits of the proteasome via its ubiquitin-like domain (PubMed:15280365, PubMed:27113755, PubMed:30612738). Key regulator of DNA repair that represses homologous recombination repair: in response to DNA damage, recruited to sites of DNA damage following phosphorylation by ATM and acts by binding and removing ubiquitinated MRE11 from damaged chromatin, leading to MRE11 degradation by the proteasome (PubMed:30612738). MRE11 degradation prevents homologous recombination repair, redirecting double-strand break repair toward non-homologous end joining (NHEJ) (PubMed:30612738). Specifically recognizes and binds mislocalized transmembrane-containing proteins and targets them to proteasomal degradation (PubMed:27113755). Collaborates with DES1/POST in the export of ubiquitinated proteins from the nucleus to the cytoplasm (PubMed:29666234). Also plays a role in the regulation of the proteasomal degradation of non-ubiquitinated GJA1 (By similarity). Acts as an adapter protein that recruits UBQLN1 to the autophagy machinery (PubMed:23459205). Mediates the association of UBQLN1 with autophagosomes and the autophagy-related protein LC3 (MAP1LC3A/B/C) and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion (PubMed:23459205).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).