

### Product datasheet for TP309514

# OriGene Technologies, Inc.

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## **UBQLN4 (NM\_020131) Human Recombinant Protein**

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human ubiquilin 4 (UBQLN4), 20 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC209514 representing NM\_020131 or AA Sequence: Red=Cloning site Green=Tags(s)

MAEPSGAETRPPIRVTVKTPKDKEEIVICDRASVKEFKEEISRRFKAQQDQLVLIFAGKILKDGDTLNQH GIKDGLTVHLVIKTPQKAQDPAAATASSPSTPDPASAPSTTPASPATPAQPSTSGSASSDAGSGSRRSSG GGPSPGAGEGSPSATASILSGFGGILGLGSLGLGSANFMELQQQMQRQLMSNPEMLSQIMENPLVQDM

MS

NPDLMRHMIMANPQMQQLMERNPEISHMLNNPELMRQTMELARNPAMMQEMMRNQDRALSNLES

**IPGGYN** 

 $ALRRMYTDIQEPMFSAAREQFGNNPFSSLAGNSDSSSSQPLRTENREPLPNPWSPSPPTSQAPGSGGEGT\\GGSGTSQVHPTVSNPFGINAASLGSGMFNSPEMQALLQQISENPQLMQNVISAPYMRSMMQTLAQNP$ 

DFA

AQMMVNVPLFAGNPQLQEQLRLQLPVFLQQMQNPESLSILTNPRAMQALLQIQQGLQTLQTEAPGLVP

SL

GSFGISRTPAPSAGSNAGSTPEAPTSSPATPATSSPTGASSAQQQLMQQMIQLLAGSGNSQVQTPEVRFQ

QQLEQLNSMGFINREANLQALIATGGDINAAIERLLGSQS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 63.7 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.





RefSeq ORF:

#### UBQLN4 (NM\_020131) Human Recombinant Protein - TP309514

For testing in cell culture applications, please filter before use. Note that you may experience Note:

some loss of protein during the filtration process.

Store at -80°C. Storage:

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 064516

Locus ID: 56893 **UniProt ID:** Q9NRR5 3545 RefSeq Size: 1q22 Cytogenetics:

1802 Synonyms: A1U; A1Up; C1orf6; CIP75; UBIN

**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 DESI1/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

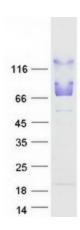
autophagy-related protein LC3 (MAP1LC3A/B/C) and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion

(PubMed:23459205).[UniProtKB/Swiss-Prot Function]

**Protein Families:** Druggable Genome



# **Product images:**



Coomassie blue staining of purified UBQLN4 protein (Cat# TP309514). The protein was produced from HEK293T cells transfected with UBQLN4 cDNA clone (Cat# [RC209514]) using MegaTran 2.0 (Cat# [TT210002]).