

Product datasheet for **SR311223**

UBQLN4 Human siRNA Oligo Duplex (Locus ID 56893)

Product data:

Product Type:	siRNA Oligo Duplexes
Purity:	HPLC purified
Quality Control:	Tested by ESI-MS
Sequences:	Available with shipment
Stability:	One year from date of shipment when stored at -20°C.
# of transfections:	Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).
Note:	Single siRNA duplex (10nmol) can be ordered.
RefSeq:	NM_001304342 , NM_020131
UniProt ID:	Q9NRR5
Synonyms:	A1U; A1Up; C1orf6; CIP75; UBIN
Components:	UBQLN4 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 56893) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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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]

Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).