

# Product datasheet for TR509916

# UbqIn4 Mouse shRNA Plasmid (Locus ID 94232)

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Ubqln4 Mouse shRNA Plasmid (Locus ID 94232)
Locus ID:	94232
Synonyms:	A1u; A1Up; Al663987; CIP75; UBIN
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ubqln4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 94232). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC017686, NM 033526, NM 033526.1, NM 033526.2</u>
UniProt ID:	<u>Q99NB8</u>



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## **DRIGENE** Ubqln4 Mouse shRNA Plasmid (Locus ID 94232) – TR509916

Summary:	Regulator of protein degradation that mediates the proteasomal targeting of misfolded, mislocalized or accumulated proteins (By similarity). 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 (By similarity). 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 (By similarity). MRE11 degradation prevents homologous recombination repair, redirecting double-strand break repair toward non-homologous end joining (NHEJ) (By similarity). Specifically recognizes and binds mislocalized transmembrane-containing proteins and targets them to proteasomal degradation (By similarity). Collaborates with DESI1/POST in the export of ubiquitinated proteins from the nucleus to the cytoplasm (By similarity). Plays a role in the regulation of the proteasomal degradation of non-ubiquitinated GJA1 (PubMed:18079109, PubMed:20940304). Acts as an adapter protein that recruits UBQLN1 to the autophagy machinery (By similarity). 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 (By similarity). [UniProtKB/Swiss-Prot Function]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .
Performance Guaranteed:	OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
	Please provide your data indicating the transfection efficiency and measurement of gene

expression knockdown compared to the scrambled shRNA control (Western Blot data

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preferred).