

Product datasheet for TR512866

OriGene Technologies, Inc.

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Ubr2 Mouse shRNA Plasmid (Locus ID 224826)

Product data:

Product Type: shRNA Plasmids

Product Name: Ubr2 Mouse shRNA Plasmid (Locus ID 224826)

Locus ID: 224826

Synonyms: 9930021A08Rik; Al462103; AW540746; E130209G04Rik; ENSMUSG00000043296; mKIAA0349

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Fulbiliycili

Format: Retroviral plasmids

Components: Ubr2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

224826). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC031403, BC075642, NM 001177374, NM 146078, NM 146078.1, NM 146078.2,

NM 146078.3, NM 001177374.1, BC031403.1, BC025617, BC026391, BC044903

UniProt ID: Q6WKZ8

Summary: E3 ubiquitin-protein ligase which is a component of the N-end rule pathway. Recognizes and

binds to proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation. Plays a critical role in chromatin inactivation and chromosome-wide transcriptional silencing during meiosis via ubiquitination of histone H2A. Binds leucine and is a negative regulator of the leucine-mTOR

signaling pathway, thereby controlling cell growth (By similarity). Required for spermatogenesis, promotes, with Tex19.1, SPO11-dependent recombination foci to accumulate and drive robust homologous chromosome synapsis (PubMed:28708824). Polyubiquitinates LINE-1 retrotransposon encoded, LIRE1, which induces degradation, inhibiting LINE-1 retranstoposon mobilization (PubMed:28806172).[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.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).