

Product datasheet for TL509011

Ube2w Mouse shRNA Plasmid (Locus ID 66799)

Product data:

OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Ube2w Mouse shRNA Plasmid (Locus ID 66799)
Locus ID:	66799
Synonyms:	6130401J04Rik
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Ube2w - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 66799). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>BC020124, NM 001271016, NM 001271017, NM 025773, NR 073122, NM 025773.1, NM 025773.2, NM 025773.3, NM 001271017.1, NM 001271016.1, NM 025773.4</u>
UniProt ID:	<u>Q8VDW4</u>
Summary:	Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. Specifically monoubiquitinates the N-terminus of various substrates, including ATXN3, MAPT/TAU, POLR2H/RPB8 and STUB1/CHIP, by recognizing backbone atoms of disordered N-termini (PubMed:21855799, PubMed:21229326). Involved in degradation of misfolded chaperone substrates by mediating monoubiquitination of STUB1/CHIP, leading to recruitment of ATXN3 to monoubiquitinated STUB1/CHIP, and restriction of the length of ubiquitin chain attached to STUB1/CHIP substrates by ATXN3 (PubMed:21855799). After UV irradiation, but not after mitomycin-C (MMC) treatment, acts as a specific E2 ubiquitin- conjugating enzyme for the Fanconi anemia complex by associating with E3 ubiquitin-protein ligase FANCL and catalyzing monoubiquitination of FANCD2, a key step in the DNA damage pathway (PubMed:21229326). In vitro catalyzes 'Lys-11'-linked polyubiquitination. UBE2W- catalyzed ubiquitination occurs also in the presence of inactive RING/U-box type E3s, i.e. lacking the active site cysteine residues to form thioester bonds with ubiquitin, or even in the absence of E3, albeit at a slower rate (By similarity).[UniProtKB/Swiss-Prot Function]



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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).

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