

## Product datasheet for TR517394

## **Otulin Mouse shRNA Plasmid (Locus ID 432940)**

## **Product data:**

## OriGene Technologies, Inc.

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Droduct Typo	shRNA Plasmids
Product Type:	
Product Name:	Otulin Mouse shRNA Plasmid (Locus ID 432940)
Locus ID:	432940
Synonyms:	C79097; Fam105b; m3Sapc; m7-1Sapc
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Otulin - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 432940). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC087945, NM 001013792, NM 001013792.1, NM 001013792.2, BC028541</u>
UniProt ID:	<u>Q3UCV8</u>
Summary:	Deubiquitinase that specifically removes linear ('Met-1'-linked) polyubiquitin chains to substrates and acts as a regulator of angiogenesis and innate immune response (PubMed:23708998, PubMed:27523608, PubMed:29950720). Required during angiogenesis, craniofacial and neuronal development by regulating the canonical Wnt signaling together with the LUBAC complex (PubMed:23708998). Acts as a negative regulator of NF-kappa-B by regulating the activity of the LUBAC complex (By similarity). OTULIN function is mainly restricted to homeostasis of the LUBAC complex: acts by removing 'Met-1'-linked autoubiquitination of the LUBAC complex, thereby preventing inactivation of the LUBAC complex (PubMed:29950720). Acts as a key negative regulator of inflammation by restricting spontaneous inflammation and maintaining immune homeostasis (PubMed:27523608, PubMed:29950720). In myeloid cell, required to prevent unwarranted secretion of cytokines leading to inflammation and autoimmunity by restricting linear polyubiquitin formation (PubMed:27523608). Plays a role in innate immune response by restricting linear polyubiquitin formation on LUBAC complex in response to NOD2 stimulation, probably to limit NOD2-dependent proinflammatory signaling (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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