

Product datasheet for **TR501421**

Myo7a Mouse shRNA Plasmid (Locus ID 17921)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Myo7a Mouse shRNA Plasmid (Locus ID 17921)
Locus ID:	17921
Synonyms:	Hdb; Myo7; nmf371; polka; sh-1; sh1; USH1B
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Myo7a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 17921). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001256081 , NM_001256082 , NM_001256083 , NM_008663 , NM_008663.1 , NM_008663.2 , NM_001256083.1 , NM_001256082.1 , NM_001256081.1 , BC156494 , BC172681
UniProt ID:	P97479
Summary:	Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which are then moved relative to actin filaments. In the retina, plays an important role in the renewal of the outer photoreceptor disks. Plays an important role in the distribution and migration of retinal pigment epithelial (RPE) melanosomes and phagosomes, and in the regulation of opsin transport in retinal photoreceptors. Mediates intracellular transport of RPE65 in the retina pigment epithelium. In the inner ear, plays an important role in differentiation, morphogenesis and organization of cochlear hair cell bundles. Motor protein that is a part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates mechanotransduction in cochlear hair cells. Required for normal hearing. Involved in hair-cell vesicle trafficking of aminoglycosides, which are known to induce ototoxicity. [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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .


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**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).