

## **Product datasheet for TR510588**

## Otol1 Mouse shRNA Plasmid (Locus ID 229389)

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Otol1 Mouse shRNA Plasmid (Locus ID 229389)

**Locus ID:** 229389 **Synonyms:** Gm414

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Otol1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

229389). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001018031, NM 001018031.1, NM 001018031.2, BC150904

UniProt ID: Q4Z|M7

**Summary:** Collagen-like protein specifically expressed in the inner ear, which provides an organic

scaffold for otoconia, a calcium carbonate structure in the saccule and utricle of the ear (PubMed:21655225, PubMed:24748133, PubMed:29076638). Acts as a scaffold for

biomineralization: sequesters calcium and forms interconnecting fibrils between otoconia

that are incorporated into the calcium crystal structure (PubMed:21655225,

PubMed:24748133, PubMed:29076638). Together with OC90, modulates calcite crystal morphology and growth kinetics (PubMed:24748133).[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>.

**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## 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).