

Product datasheet for TR301873

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Rotatin (RTTN) Human shRNA Plasmid Kit (Locus ID 25914)

Product data:

Product Type: shRNA Plasmids

Product Name: Rotatin (RTTN) Human shRNA Plasmid Kit (Locus ID 25914)

Locus ID: 25914 Synonyms: MSSP

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

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

25914). 5µg purified plasmid DNA per construct

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

RefSeq: BC013774, NM 001318520, NM 173630, NM 173630.1, NM 173630.2, NM 173630.3,

BC007359, BC026879, BC046222, BC046931, BC047602, BC143723, BC156291

UniProt ID: Q86VV8

Summary: This gene encodes a large protein whose specific function is unknown. Absence of the

orthologous protein in mouse results in embryonic lethality with deficient axial rotation, abnormal differentiation of the neural tube, and randomized looping of the heart tube during development. In human, mutations in this gene are associated with polymicrogyria with seizures. In human fibroblasts this protein localizes at the ciliary basal bodies. Given the intracellular localization of this protein and the phenotypic effects of mutations, this gene is suspected of playing a role in the maintenance of normal ciliary structure which in turn effects the developmental process of left-right organ specification, axial rotation, and perhaps

notochord development. [provided by RefSeg, Jan 2013]

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 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).