

Product datasheet for **SC309199**

Rotatin (RTTN) (NM_173630) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rotatin (RTTN) (NM_173630) Human Untagged Clone
Tag:	Tag Free
Symbol:	Rotatin
Synonyms:	MSSP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309199 representing NM_173630. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
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TACAAGGATGACGACGATAAGGTTTAAACGCCCGGC

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Restriction Sites: SgfI-MluI

ACCN: NM_173630

Insert Size: 6681 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_173630.3](#)

RefSeq Size: 7109 bp

RefSeq ORF: 6681 bp

Locus ID: 25914

UniProt ID: [Q86VV8](#)

Cytogenetics: 18q22.2

MW: 248.6 kDa

Gene 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 RefSeq, Jan 2013]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).