

## Product datasheet for **RC228103**

### MOSMO (NM\_001164579) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MOSMO (NM\_001164579) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MOSMO  
**Synonyms:** ATTHOG; BC030336; C16orf52  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC228103 representing NM\_001164579  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATAAACTGACCATCATCTCAGGATGTCTCTTTCTGGCCGCCGATATCTTCGCCATCGCCAGCATCG  
CCAACCCGGACTGGATCAACACCCGGGAGTCTGCGGGAGCACTACTGTGGCCTCGTGCACAGTGTCA  
AACAAATCCATGGACGAGACCGGACGTGCATCCCTCCCCGGCTCCCCGGAGTGGGTACCACACTGTTT  
TTTATCATCATGGGAATCATTTCATTGACTGTCACATGTGGTTTGCTGGTGGCTTCCCACTGGCGAAGAG  
AAGCTACAAAATATGCTCGATGGATAGCATTCACTGGAATGATCCTTTTCTGTATGGCTGCCCTAATATT  
TCCAATAGGATTTTACATCAATGAAGTCGAGGTCAACCTTATAAATTACCAACAACACAGTAGTTGGG  
TCATCATATGTACTTTTTGTCTTATCAATTTTCTTACAATAGTAGGACTTCTATTTGCTGGCAAAGTTT  
GTTTACCAGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC228103 representing NM\_001164579  
Red=Cloning site Green=Tags(s)

MDKLTIIISGCLFLAADIFAIASIANPDWINTGESAGALTVGLVRQCQTIHGRDRTICIPRLPPEWVTTLF  
FIIMGIISLTVTCGLLVASHWRREATKYARWIAFTGMILFCMAALIFPIGFYINEVGGQPYKLPNNTVVG  
SSYVLFVLSIFFTIVGLLFAGKVCLPG

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

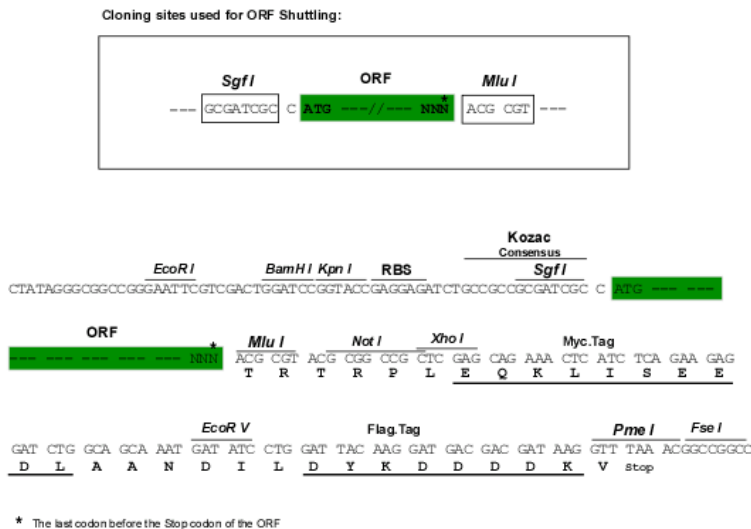
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8039\\_a03.zip](https://cdn.origene.com/chromatograms/mk8039_a03.zip)



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001164579

ORF Size: 501 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_001164579.2](#)

RefSeq ORF: 504 bp

Locus ID: 730094

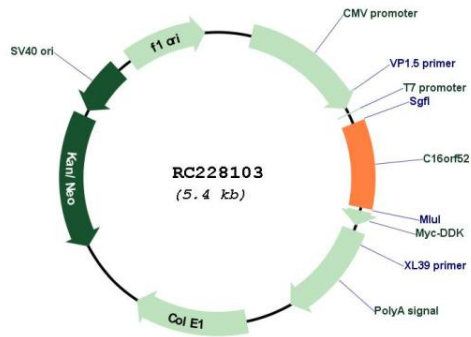
UniProt ID: [Q8NHV5](#)

Cytogenetics: 16p12.2

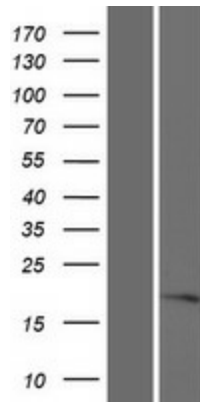
**MW:** 18.1 kDa

**Gene Summary:** Acts as a negative regulator of hedgehog signaling probably by promoting internalization and subsequent degradation of smoothed protein (SMO) present in the ciliary membrane. Plays a role in sonic hedgehog (SHH)-induced spinal neural progenitor cells differentiation. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC228103



Western blot validation of overexpression lysate (Cat# [LY431131]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228103 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).