

## Product datasheet for MR215395

### Ostn (NM\_198112) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ostn (NM\_198112) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Ostn  
**Synonyms:** Ostc  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR215395 representing NM\_198112  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTGGACTGGAGATTGGCAAGTACACACTTCATCCTGGCTATGATTGTGATGCTGTGGGGCTCAGGAA  
 AGGCATTCTCTGTGGACTTAGCATCACAGGAGTTTGGAAACAGCAAGCTTGCACTCTCCACCCACAGCCAG  
 AGAAGAGAAGTCAGCCACTGAGCTTTGGCTAAGCTCCTGCGTCTTGATGATCTGGTGTCTTACAGAAAT  
 GACGTATTTGAGACCAAGAAAAAGAGAAGCTTCTCTGGCTTTGGGTCTCCCTTGACAGACTCTCAGCTG  
 GGTCTGTAGAGCATAGAGGGAACAAAGGAAAGCAGTAGATCATTCAAAAAGCGTTTGGTATTCCCAT  
 GGATCGGATTGGTAGAAACCGGCTCTCCAGTTCAGAGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR215395 representing NM\_198112  
 Red=Cloning site Green=Tags(s)

MLDWRLASTHFILAMIVMLWSGKAFSVDLASQEFGTASLQSPPTAREEKSATELSAKLLRLDDLVSLEN  
 DVFETKKKRSFSGFGSPLDRLSAGSVEHRGKQRKAVDHSKKRFGIPMDRIGRNRLSSSRG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9006\\_c10.zip](https://cdn.origene.com/chromatograms/mm9006_c10.zip)

**Restriction Sites:** SgfI-MluI



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## Cloning Scheme:



ACCN: NM\_198112

ORF Size: 390 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

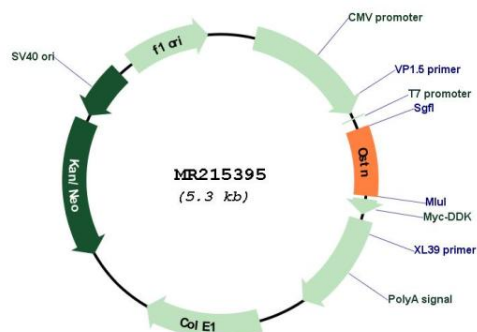
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_198112.2</a> , <a href="#">NP_932780.1</a>
<b>RefSeq Size:</b>	1268 bp
<b>RefSeq ORF:</b>	393 bp
<b>Locus ID:</b>	239790
<b>UniProt ID:</b>	<a href="#">P61364</a>
<b>Cytogenetics:</b>	16 B2
<b>MW:</b>	14.9 kDa
<b>Gene Summary:</b>	Hormone that acts as a ligand for natriuretic peptide receptor NPR3/NPR-C and promotes bone growth and physical endurance in muscle. Acts as a regulator of osteoblast differentiation and bone growth by binding to natriuretic peptide receptor NPR3/NPR-C, thereby preventing binding between NPR3/NPR-C and natriuretic peptides, leading to increase cGMP production (PubMed:14523025, PubMed:17951249). Required to enhance physical endurance: induced following physical exercise in muscle and promotes cGMP production, probably by interacting with NPR3/NPR-C (PubMed:26668395). May act as an autocrine and paracrine factor linked to glucose metabolism in skeletal muscle (PubMed:15044443).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR215395