

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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGACTGGAGATTGGCAAGTACACACTTCATCCTGGCTATGATTGTGATGCTGTGGGGCTCAGGAA
AGGCATTCTCTGTGGACTTAGCATCACAGGAGTTTGAACAGCAAGCTTGCAGTCTCCACCCACAGCCAG
AGAAGAGAAGTCAGCCACTGAGCTTTGGCTAAGCTCCTGCGTCTTGATGATCTGGTGTCCCTTAGAGAAT
GACGTATTTGAGACCAAGAAAAAGAGAAGCTTCTCTGGCTTTGGGTCTCCCTTGACAGACTCTCAGCTG
GGTCTGTAGAGCATAGAGGAAACAAAGAAAGCAGTAGATCATTCAAAAAGCGGTTTGGTATTCCCAT
GGATCGGATTGGTAGAAACCGGCTCTCCAGTTCAGAGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR215395 representing NM_198112
Red=Cloning site Green=Tags(s)

MLDWRLASTHFILAMIVMLWGSFKAFSVDLASQEFGTASLQSPPTAREEKSATELSAKLLRLDDLVSLEN
DVFETKKKRSFSGFGSPLDRLSAGSVEHRGKQRKAVDHSKKRFGIPMDRIGRNRLSSSRG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9006_c10.zip

Restriction Sites: SgfI-MluI



[View online »](#)

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 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.

RefSeq: [NM_198112.2](#), [NP_932780.1](#)

RefSeq Size: 1268 bp

RefSeq ORF: 393 bp

Locus ID: 239790

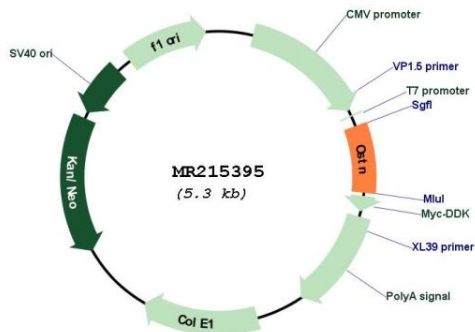
UniProt ID: [P61364](#)

Cytogenetics: 16 B2

MW: 14.9 kDa

Gene Summary: 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