

Product datasheet for **SC332133**

Osteopontin (SPP1) (NM_001251829) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Osteopontin (SPP1) (NM_001251829) Human Untagged Clone
Tag: Tag Free
Symbol: Osteopontin
Synonyms: BNSP; BSPI; ETA-1; OPN
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC332133 representing NM_001251829.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGAGAATTGCAGTGATTTGCTTTTGCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAGGCTGAT
TCTGGAAGTTCTGAGGAAAAGCAGACCCCTTCCAAGTAAGTCCAACGAAAGCCATGACCACATGGATGAT
ATGGATGATGAAGATGATGATGACCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGAT
GTAGATGACACTGATGATTCTCACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAAGTGGTC
ACTGATTTTCCCACGGACCTGCCAGCAACCGAAGTTTTCACTCCAGTTGTCCCACAGTAGACACATAT
GATGGCCGAGGTGATAGTGTGGTTTATGGACTGAGGTCAAATCTAAGAAGTTTCGCAGACCTGACATC
CAGTACCCTGATGCTACAGACGAGGACATCACCTCACACATGGAAGCGAGGAGTTGAATGGTGCATAC
AAGGCCATCCCGTTGCCAGGACCTGAACGCGCCTTCTGATTGGGACAGCCGTGGGAAGGACAGTTAT
GAAACGAGTCAGCTGGATGACCAGAGTGTGAAACCCACAGCCACAAGCAGTCCAGATTATATAAGCGG
AAAGCCAATGATGAGAGCAATGAGCATTCCGATGTGATTGATAGTCAGGAACCTTCCAAAGTCAGCCGT
GAATCCACAGCCATGAATTTACAGCCATGAAGATATGCTGGTTGTAGACCCCAAAAGTAAGGAAGAA
GATAAACACCTGAAATTCGATTTCTCATGAATTAGATAGTGCATCTTCTGAGGTCAAT
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Restriction Sites: Sgfl-MluI
ACCN: NM_001251829
Insert Size: 822 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).
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).



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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_001251829.1](#)

RefSeq Size: 1511 bp

RefSeq ORF: 822 bp

Locus ID: 6696

UniProt ID: [P10451](#)

Cytogenetics: 4q22.1

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: ECM-receptor interaction, Focal adhesion, Toll-like receptor signaling pathway

MW: 30.8 kDa

Gene Summary: The protein encoded by this gene is involved in the attachment of osteoclasts to the mineralized bone matrix. The encoded protein is secreted and binds hydroxyapatite with high affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. This protein is also a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]
Transcript Variant: This variant (4) differs in the 5' UTR and coding sequence and lacks two alternate in-frame exons compared to variant 5. The resulting isoform (4) has a shorter and distinct N-terminus and lacks an alternate internal segment compared to isoform e. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.