

Product datasheet for SC127388

OriGene Technologies, Inc.

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Osteopontin (SPP1) (BC017387) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Osteopontin (SPP1) (BC017387) Human Untagged Clone

Tag: Tag Free

Symbol: Osteopontin

Synonyms: BNSP; bone sialoprotein I; BSPI; early T-lymphocyte activation 1; ETA-1; MGC110940; OPN;

osteopontin; osteopontin/immunoglobulin alpha 1 heavy chain constant region fusion protein; secreted phosphoprotein 1 (osteopontin, bone sialopro; SPP1/CALPHA1 fusion

Mammalian Cell

Selection:

None

Vector: pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for BC017387, the custom clone sequence may differ by one or more

nucleotides

ATGAGAATTGCAGTGATTTGCTTTTGCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAGGCTGATT
CTGGAAGTTCTGAGGAAAAGCAGCTTTACAACAAATACCCAGATGCTGTGGCCACATGGCTAAACCCTGA
CCCATCTCAGAAGCAGAATCTCCTAGCCCCACAGAATGCTGTGTCCTCTGAAGAAACCAATGACTTTAAA
CAAGAGACCCTTCCAAGTAAGTCCAACGAAAGCCATGACCACATGGATGATATGGATGATGAAGATGATG
ATGACCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGATGTAGATGAAGAAGATGATC
TCACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAACTGGTCACTGATTTTCCCACGGACCTG
CCAGCAACCGAAGTTTTCACTCCAGTTGTCCCCACAGTAGACACATATGATGGCCGAGGTGATAGTGTGG
TTTATGGACTGAGGTCAAAATCTAAGAAGTTTCGCAGACCTGACATCCAGTACCCTGATGCTACAGACGA
GGACATCACCTCACACATGGAAAGCGAGGAGTTGAATGGTGCATACAAGGCCATCCCCGTTGCCCAGGAC
CTGAACGCGCCTTCTGATTGGGACAGCCGTGGGAAGGACAGTTATGAAACGAGTCAGCTGGATGACCAGA
GTGCTGAAACCCACAGCCACAAGCAGTCCAGATTATATAAAGCGGAAAGCCAATGATGAGACCATGACCATGAATTTCACAGC
CATGAAGATTAGATAGTCAGGAACTTTCCAAAAGTCAGCCGTGAATTCCACAGCCATGAATTTCACAGC
CATGAAGATATGCTGGTTGTAGACCCCCAAAAGTAAGGAAGAAAAACACCTGAAATTTCGTATTTCTC
ATGAATTAGATAGTGCATCTTCTGAGGTCAATTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja3799 c03.zip

Restriction Sites: Notl-Notl **ACCN:** BC017387



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Insert Size: 1550 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 customercom 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

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: <u>BC017387.1</u>, <u>AAH17387.1</u>

RefSeq Size: 1499 bp
RefSeq ORF: 945 bp
Locus ID: 6696
Cytogenetics: 4q22.1

Domains:

Protein Families: Druggable Genome, Secreted Protein

OSTEO

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

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]