

Product datasheet for **SC320127**

Osteopontin (SPP1) (NM_001040060) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Osteopontin (SPP1) (NM_001040060) Human Untagged Clone
Tag:	Tag Free
Symbol:	Osteopontin
Synonyms:	BNSP; BSPI; ETA-1; OPN
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001040060.1
GTTGGTGGAGGATGTCTGCAGCAGCATTAAATTCTGGGAGGCTTGGTTGTCAGCAGCA
GCAGGAGGAGGCAGAGCAGCATCGTCGGGACCAGACTCGTCTCAGGCCAGTTGCAGCC
TTCTCAGCCAAACGCCGACCAAGGAAAACACTCACTACCATGAGAATTGCAGTGATTTGCTT
TTGCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAGGCTGATTCTGGAAGTCTGA
GGAAAAGCAGAATGCTGTGCTCTGAAGAAACCAATGACTTTAAACAAGAGACCCTTCC
AAGTAAGTCCAACGAAAGCCATGACCACATGGATGATATGGATGATGAAGATGATGATGA
CCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGATGTAGATGACTGTA
TGATTCTACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAACTGGTCACTGA
TTTTCCCAGGACCTGCCAGCAACCGAAGTTTTCACTCCAGTTGTCCCCACAGTAGACAC
ATATGATGGCCGAGGTGATAGTGTGGTTTATGGACTGAGGTCAAATCTAAGAAGTTTCG
CAGACCTGACATCCAGTACCCTGATGCTACAGACGAGGACATCACCTCACACATGGAAAG
CGAGGAGTTGAATGGTGCATACAAGGCCATCCCCGTTGCCCAGGACCTGAACGCGCCTTC
TGATTGGGACAGCCGTGGGAAGGACAGTTATGAAACGAGTCAGCTGGATGACCAGAGTGC
TGAAACCCACAGCCACAAGCAGTCCAGATTATATAAGCGGAAAGCCAATGATGAGAGCAA
TGAGCATTCCGATGTGATTGATAGTCAGGAACTTTCCAAAGTCAGCCGTGAATCCACAG
CCATGAATTTACAGCCATGAAGATATGCTGGTTGTAGACCCAAAAGTAAGGAAGAAGA
TAAACACCTGAAATTTTCGATTTTCTCATGAATTAGATAGTGCATCTTCTGAGGTCAATTA
AAAGGAGAAAAAATAACAATTTCTCACTTTGCATTTAGTCAAAGAAAAAATGCTTTATAG
CAAAATGAAAGAGAACATGAAATGCTTTCTCAGTTTATTGGTTGAATGTGTATCTAT
TTGAGTCTGGAATAACTAATGTGTTTGATAATTAGTTTGTGGCTTCATGAAAAC
TCCCTGTAAACTAAAAGCTTCAGGGTTATGTCTATGTTTATTCTATAGAAGAAATGCAAA
CTACTGATTTTAAATTTTGTATTCTCTCATGAATAGAAATTTATGTAGAAGCAAA
CAAAATACTTTTACCCACTTAAAAAGAGAATATAACATTTTATGCTACTATAATCTTTTG
TTTTTAAAGTTAGTGTATTTTTGTTGTGATTATCTTTTGTGGTGTGAATAAATCTTTT
ATCTTGAATGTAATAAGAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA



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Restriction Sites:	Please inquire
ACCN:	NM_001040060
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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>NM_001040060.1</u> , <u>NP_001035149.1</u>
RefSeq Size:	1560 bp
RefSeq ORF:	864 bp
Locus ID:	6696
UniProt ID:	<u>P10451</u>
Cytogenetics:	4q22.1
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	ECM-receptor interaction, Focal adhesion, Toll-like receptor signaling pathway
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (3) differs in the 5' UTR and coding sequence and lacks an alternate in-frame exon compared to variant 5. The resulting isoform (OPN-c, as described in PubMed: 7837791) has a shorter and distinct N-terminus and lacks an alternate internal segment compared to isoform e.</p>