

## Product datasheet for **SC117438**

### Bone marrow stromal cell antigen 1 (BST1) (NM\_004334) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Bone marrow stromal cell antigen 1 (BST1) (NM_004334) Human Untagged Clone
Tag:	Tag Free
Symbol:	Bone marrow stromal cell antigen 1
Synonyms:	CD157
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117438 sequence for NM_004334 edited (data generated by NextGen Sequencing)

```
ATGGCGGCCCCAGGGGTGCGCGGCATCGCGGCTGCTCCAGTGTCTGCTGCAGCTTCTGCTT
CTACTGTTGCTGTGGCGCGGGCGGGCGCGCGCGGTGGCGCGGGGAGGGCACCAGC
GCACACTTGCGGGACATCTTCTGGGCCGCTGCGCCGAGTACCGCGCACTGCTGAGTCCC
GAGCAGCGGAACAAGAACTGCACAGCCATCTGGGAAGCCTTTAAAGTGGCGCTGGACAAG
GATCCCTGCTCCGTGCTGCCCTCAGACTATGACCTTTTTATTAACCTTGCCAGGCACTCT
ATTCCCAGAGATAAGTCCCTGTTCTGGGAAAATAGCCACCTCCTTGTTAACAGCTTTGCA
GACAACACCCGTCGTTTTATGCCCTGAGCGATGTTCTGTATGGCAGGGTTGCAGATTTT
TTGAGCTGGTGTCAACAGAAAAATGACTCTGGACTCGATTACCAATCCTGCCCTACATCA
GAAGACTGTGAAAATAATCCTGTGGATTCTTTTGGAAAAGGGCATCCATCCAGTATTCC
AAGGATAGTTCTGGGGTATCCACGTGATGCTGAATGGTTCAGAGCCAACAGGAGCCTAT
CCCATCAAAGGTTTTTTTTGCAGATTATGAAATCCAAACCTCCAGAAGGAAAAAATTACA
CGAATCGAGATCTGGGTTATGCATGAAATTGGGGGACCCAATGTGGAATCCTGCGGGGAA
GGCAGCATGAAAGTCTGGAAAAGAGGCTGAAGGACATGGGGTCCAGTACAGCTGTATT
AATGATTACCGACCAGTGAAGCTTTACAGTGGTGGACCACAGCACCCATCCTGACTGT
GCCTTAAAGTCGGCAGCAGCCGCTACTCAAAGAAAAGCCCAAGTCTTTATACAGAACAA
AGGGCGGGTCTTATCATTCCCCTCTTTCTGGTGTGGCTTCCCGGACTCAACTGTAA
```

Clone variation with respect to NM\_004334.2  
434 g=>a;943 a=>c



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004334 unedited  
 NGGTCACATTTGTATACGACTCACTATAGGCGGCCGCAATTCGCACCAGGNAGCACGGG  
 ACTGGAGGGACCAAAGTTCCCGCATGGCGGCCAGGGGTGCGCGGCATCGCGGCTGCTCC  
 AGCTGCTGCTGCAGCTTCTGCTTCTACTGTTGCTGCTGGCGGGCGGGCGCGCGCGC  
 GGTGGCGCGGGGAGGGCACACAGCGCACACTTGCGGGACATCTTCTGGGCCGCTGCGCCG  
 AGTACCGCGCACTGCTGAGTCCCGAGCAGCGGAACAAGAACTGCACAGCCATCTGGGAAG  
 CCTTTAAAGTGGCGTGGACAAGGATCCCTGCTCCGTGCTGCCCTCAGACTATGACCTTT  
 TTATTAACCTTGCCAGGCACTCTATTCCAGAGATAAGTCCCTGTTCTGGGAAAAATAGCC  
 ACCTCCTTGTTAACAGCTTTGCAGACAACACCCGTCGTTTTATGCCCTGAGCGATGTTT  
 TGTATGGCAGGGTTCAGATTTCTTGAGCTGGTGTCAACAGAAAAATGACTCTGGACTCG  
 ATTACCAATCCTGCCCTACATCAGAAGACTGTGAAAAATACTGTGGATTCTTTTGGGA  
 AAAGGGCATCCATCCAGTATTCCAAGGATAGTTCTGGNGTGATCCACGTCATGCTGAATG  
 GTTCAGAGCCAACAGGAGCCTATCCCATCAAAGGTTTTTTTGCAGATTATGAAATTCNA  
 ACCTNCAGAAGGAAAAAATTACACGAAATCGAGATCTGGGTTATGCATGAAATGGGGGA  
 CCCCATGTGGAATCCTGCGGGGAAAGCAGCATGAAAATCCTGGAAAAGAAGCTGAAGGAC  
 ATGGGGTTCCAGTACAGCTGTTTTATTGATACCGACCAGTGAAACTCTTAAGGTGCCTGG  
 AACACAGCACCCATTCTGACTGTGCC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_004334 unedited  
 NCGCCTATTATGNACGCGGCCGCTTTCTANGATCGTTTTTTTTTTTTTTTTTTTGGAGTA  
 AAAACAGCTTTATTAGAATTCTCTTAAATGTTTGATAATATAACAAGCAGTCTGACTCCC  
 AATGCTTTGTGTCATTATACAAATAAGAAAATAACTTGCCTTAATTCTAATGCAGCATT  
 TTTAACCTGCTAAATAGAACTAACTTCTGTTTTCTGAAATCCTGAACATATGCCTCATTG  
 AAATACCATTTTTCAGGACATCGTTTTCCAGCATAAAAGCTTCTTTAGATAACAGAAATCA  
 TTTGGTATACACAGAACCGAATGATGACTGCAAGGGGAGGCTGCAGGGCTGGAGGAGGG  
 TTAGAGCAACACAGTTTCCAGTTACAGTTGAGTCCGGGAAGCCAGCACCAGAAAGAGGGG  
 AATGATAAGACCCGCCCTTTGTTCTGTATAAAGACTTGGGGCTTTTCTTTGAGTAGCGGC  
 TGCTGCCGACTTTAAGGCACAGTCAGGATGGGTGCTGTGGTCCACGCACTGTAAGAGCTT  
 CACTGGTCGGTAATCATTAAATACAGCTGTACTGGAACCCCATGTCCTTCAGCCTCTTTTC  
 CAGGACTTTCATGCTGCCTTCCCCGCANGATTCCACATTGGGTCCCCCAATTTTCATGCAT  
 AACCCAGATCTCGATTTCGTGATTTTTTCTTCTGGAAGTTTGGAAATTTTCATAATCTGCA  
 AAAAAACTTTGATGGGATAGGCTCCTGTTGGCTCTGAACCATTACAGCATGACGTGGATCA  
 CCCCAAATATCCTTGGGATACTGGATGGATGCCCTTTTCCAAAAGGATCCACAGGATA  
 TTTTCACAGTCTCCTGATGTANGCCAGATTGGTAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_004334

**Insert Size:**

1250 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_004334.1</a> , <a href="#">NP_004325.1</a>
<b>RefSeq Size:</b>	1411 bp
<b>RefSeq ORF:</b>	957 bp
<b>Locus ID:</b>	683
<b>UniProt ID:</b>	<a href="#">Q10588</a>
<b>Cytogenetics:</b>	4p15.32
<b>Domains:</b>	Rib_hydrolase
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Metabolic pathways, Nicotinate and nicotinamide metabolism
<b>Gene Summary:</b>	Bone marrow stromal cell antigen-1 is a stromal cell line-derived glycosylphosphatidylinositol-anchored molecule that facilitates pre-B-cell growth. The deduced amino acid sequence exhibits 33% similarity with CD38. BST1 expression is enhanced in bone marrow stromal cell lines derived from patients with rheumatoid arthritis. The polyclonal B-cell abnormalities in rheumatoid arthritis may be, at least in part, attributed to BST1 overexpression in the stromal cell population. [provided by RefSeq, Jul 2008]