

Product datasheet for **RC204151**

Bone marrow stromal cell antigen 1 (BST1) (NM_004334) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bone marrow stromal cell antigen 1 (BST1) (NM_004334) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bone marrow stromal cell antigen 1
Synonyms:	CD157
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204151 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCCAGGGGTGCGCGGCATCGCGGCTGCTCCAGCTGCTGCTGCAGCTTCTGCTTCTACTGTTGC
TGCTGGCGGGCGGGCGCGCGCGGTGGCGGGGAGGGCACCAGCGCACACTTGCGGGACATCTT
CCTGGGCCGCTGCGCCGAGTACCGCGCACTGCTGAGTCCCGAGCAGCGGAACAAGAACTGCACAGCCATC
TGGGAAGCCTTTAAAGTGGCGCTGGACAAGGATCCCTGCTCCGTGCTCCCTCAGACTATGACCTTTTTA
TTAACTTGTCCAGGCACTCTATCCAGAGATAAGTCCCTGTTCTGGGAAATAGCCACCTCCTTGTAA
CAGCTTTGCAGACAACACCCGTCGTTTTATGCCCTGAGCGATGTTCTGTATGGCAGGGTTCAGATTTC
TTGAGCTGGTGTGACAGAAAAATGACTCTGGACTCGATTACCAATCCTGCCCTACATCAGAAGACTGTG
AAAATAATCCTGTGGATTCTTTTGGAAAAGGGCATCCATCCAGTATTCCAAGGATAGTTCTGGGGTGAT
CCACGTCATGCTGAATGGTTCAGAGCCAACAGGAGCCTATCCCATCAAAGGTTTTTTGCAGATTATGAA
ATTCCAAACCTCCAGAAGGAAAAAATTACAGAAATCGAGATCTGGGTATGCATGAAATGGGGACCCA
ATGTGGAATCCTGCGGGGAAGGCAGCATGAAAGTCTGGAAAAGAGGCTGAAGGACATGGGGTCCAGTA
CAGCTGTATTAATGATTACCGACCAAGTGAAGCTTTACAGTGGTGGACCAAGCAGCAGCCATCCTGACTGT
GCCTTAAAGTCGGCAGCAGCCGCTACTCAAAGAAAAGCCCAAGTCTTTATACAGAACAAAGGGCGGGTC
TTATCATTCCCTCTTTCTGGTCTGGCTTCCAGGACTCAACTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204151 protein sequence
 Red=Cloning site Green=Tags(s)

MAAQGCAASRLLQLLLQLLLLLLLLLAAGGARARWRGEGTSAHLRDI FLGRCAEYRALLSPEQRNKNCTAI
 WEA FKVALDKDPCSVLP SDYDLFINLSRHSIPRDKSLFWENSHLLVNSFADNTRRFMPLSDVLYGRVADF
 LSWCRQKND SGLDYQSCPTSEDCENNPVDSFWKRASIYQSKDSSGVHVM L NGSEPTGAYPIKGFADYE
 IPNLQKEKITRIEIVVMHEIGGPNVESC GEGSMKVLEKRLKDMGFQYSCINDYRPVKLLQCVDHSTHPDC
 ALKSAAAATQRKAPSLYTEQRAGLIIPFLVLASRTQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6241_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004334

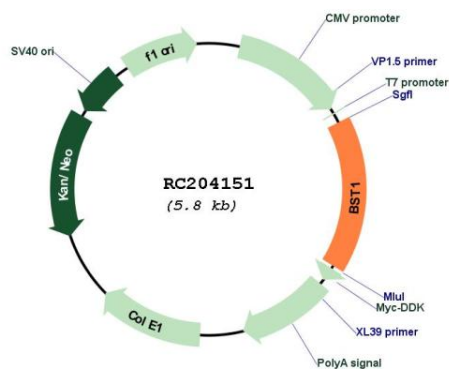
ORF Size: 954 bp

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.

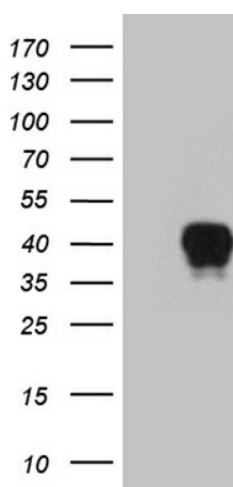
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004334.3
RefSeq Size:	1497 bp
RefSeq ORF:	957 bp
Locus ID:	683
UniProt ID:	Q10588
Cytogenetics:	4p15.32
Domains:	Rib_hydrolayse
Protein Families:	Transmembrane
Protein Pathways:	Calcium signaling pathway, Metabolic pathways, Nicotinate and nicotinamide metabolism
MW:	35.7 kDa
Gene Summary:	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]

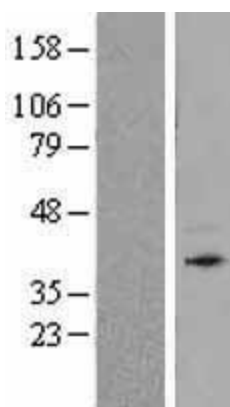
Product images:



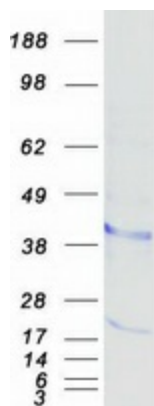
Circular map for RC204151



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BST1 (Cat# RC204151, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BST1 (Cat# [TA812180]). Positive lysates [LY418052] (100ug) and [LC418052] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418052]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204151 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BST1 protein (Cat# [TP304151]). The protein was produced from HEK293T cells transfected with BST1 cDNA clone (Cat# RC204151) using MegaTran 2.0 (Cat# [TT210002]).