

## Product datasheet for **SC108276**

### **B7-1 (CD80) (NM\_005191) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	B7-1 (CD80) (NM_005191) Human Untagged Clone
Tag:	Tag Free
Symbol:	B7-1
Synonyms:	B7; B7-1; B7.1; BB1; CD28LG; CD28LG1; LAB7
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108276 sequence for NM_005191 edited (data generated by NextGen Sequencing)

```
ATGGGCCACACACGGAGGAGGGAACATCACCATCCAAGTGTCCATACCTCAATTTCTTT  
CAGCTCTTGGTGTGGCTGGTCTTTCTCACTTCTGTTTCAGGTGTTATCCACGTGACCAAG  
GAAGTAAAAGAAGTGGCAACGCTGTCTGTGGTCACAATGTTTCTGTTGAAGAGCTGGCA  
CAAACCTCGCATCTACTGGCAAAAGGAGAAGAAAATGGTGTGACTATGATGTCTGGGGAC  
ATGAATATATGGCCCGAGTACAAGAACCGGACCATCTTTGATATCACTAATAACCTCTCC  
ATTGTGATCCTGGCTCTGCGCCCATCTGACGAGGGCACATACGAGTGTGTTGTTCTGAAG  
TATGAAAAAGACGCTTTCAAGCGGGAACACCTGGCTGAAGTGACGTTATCAGTCAAAGCT  
GACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAATTCTAATATTAGAAGGATA  
ATTTGCTCAACCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCTGGTTGGAAAATGGAGAA  
GAATTAATGCCATCAACACAACAGTTTTCCAAGATCCTGAAACTGAGCTCTATGCTGTT  
AGCAGCAAACCTGGATTTCAATATGACAACCAACCACAGCTTCATGTGCTCATCAAGTAT  
GGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCAAGCAAGAGCATTTCCT  
GATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCAGTAAATGGAATTTTTGTGATA  
TGCTGCCTGACCTACTGCTTTGCCCAAGATGCAGAGAGAGAAGGAGGAATGAGAGATTG  
AGAAGGGAAGTGTACGCCCTGTATAA
```

Clone variation with respect to NM\_005191.3



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_005191 unedited  
 ACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAACATCTCAGAAGTGGAGTCTT  
 ACCCTGAAATCAAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCAGCAAGCTGTGAAACT  
 AAATCCACAACCTTTGGAGACCCAGGAACCCCTCCAATCTCTGTGTGTTTTGTAACAT  
 CACTGGAGGGTCTTCTACGTGAGCAATTGGATTGTCATCAGCCCTGCCTGTTTTGCACCT  
 GGGAAAGTCCCTGGTCTTACTTGGTCCAATTTGTTGGCTTTCACCTTTTGACCCTAAGCA  
 TCTGAAGCCATGGGCCACACCGAGGCAGGGAACATCACCATCCAAGTGTCCATACCTC  
 AATTTCTTTCAGCTCTTGGTGTGGCTGGTCTTCTCACTTCTGTTTCAGGTGTTATCCAC  
 GTGACCAAGGAAGTAAAAGAAAGTGGCAACGCTGTCTGTGGTCACAATGTTTCTGTTGAA  
 GAGCTGGCACAACCTCGCATCTACTGGCAAAAGGAGAAGAAAAATGGTGTGACTATGATG  
 TCTGCGGACATGAATATATGGCCCGAGTACAAGAACCGACCATCTTTGATACTAAT  
 AACCTCTCCATTGTGATCCTGGCTCTGCGCCCATCTGACGAGGGCACATACGAGTGCCT  
 GTTCTGAGTATGAAAAAGACGCTTCAAGCGGGAACACCTGCCTGAAGTACGTTATCA  
 GTCAAAGCTGACTTTCCTACACCTAGAATATCCGACTTTGAAATCCCACCTTCTAATATT  
 AGAAGGAATATTTGCTCCACCTCTGGGAGCTTTCCGAGCCTCACCTCTCCCTGGCTGGA  
 AAAGGGAGAAAAATTAATGCCTCAACCCACAGTTCACAGATCCTGAAATGACCTTATGC  
 TGTACAGAAACTGGATTCAATTTGAAACCAACCCAGCTCTGGGTTCAATTAGCATGGCTCT  
 TAAATGGATACACCTCAACGAGAACAACAAGCAGAAATTTCTGATAN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_005191 unedited  
 TGGGTGGGGCTGCTGATCNCGACTTTACTTATCCCTCATTTAAATACTACTTATGTTTGT  
 ATTAATCTATCAATATATGCATACATGAATATATCCACCCACCTAGATTTTAAGCAGTAA  
 ATAAAACATTTTCGAAAAGATTAAGTTGAATTTTACAGTTCGTATATTCATGTGGTCCCT  
 TTGAAAGGGTATTCTAGAAATCACTGTTTTAGAGGAGAGGAAAGAACCAGGTAGGCAAAAT  
 GGTCTGTGAAACCTTGGTCTGGAAGCAGTGTGAGTGTAAATGTGTAGTGTGTTGGTTT  
 CATCTAAATAAACAAAGATGATTTCTTTGACACTTGAAATAAAATACAAATTCACAAAA  
 AGTAGATCAGCATTATTAAGAAACGGTTCAACTTTGTTTCTTCCCTTAGTATTGCTGAC  
 AAAGTATCTGCTGTAGAATACAGGAATTACTTAGAATAGAAACATAGTCATCACAACCTGT  
 TACTAAATGGAAAAGAAAAGAATTATTGAGTTAAGTATTCCTGTCAATACGGGAAACACT  
 GCTAGTACCTTATGTTGGTGTAGACCTCTCTGCCTACACTGAGAATATAGTTTTACACA  
 GGAGCAAGTTTTGTGAAGCAGCATAGTGAGGTAGCTAAAGCCATGGGCTGGCTCTAAAGG  
 CTTTAAAATCCCACCTGTGGGCTAACCTGCCATGAGATGTGCATTTGAAAAATGTTGTC  
 TTTCTTTTGTCTGTTCAACTCCCAATTTCCAAATGAAAATGTGATTATTCCACCTAAAGTT  
 GCGCCCTTCTGTCTAGTAAAATGGGGAAGGCCATTTTAAAGAAAGGGATCTGGGTAAC  
 ATGGACACGCGTTGGCTTTGCCTTCCCGTTTCTGGCGGAGTCGAAAAACCCAAATCCCA  
 GGGAAAAACCTTCTTAGGTTCTAAGGAGCCCTTGAAAGTTCTCCCT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_005191

**Insert Size:**

3100 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_005191.2</a> , <a href="#">NP_005182.1</a>
<b>RefSeq Size:</b>	2824 bp
<b>RefSeq ORF:</b>	2757 bp
<b>Locus ID:</b>	941
<b>UniProt ID:</b>	<a href="#">P33681</a>
<b>Cytogenetics:</b>	3q13.33
<b>Domains:</b>	ig
<b>Protein Families:</b>	Druggable Genome, Transcription Factors, Transmembrane
<b>Protein Pathways:</b>	Allograft rejection, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Graft-versus-host disease, Systemic lupus erythematosus, Toll-like receptor signaling pathway, Type I diabetes mellitus, Viral myocarditis
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a membrane receptor that is activated by the binding of CD28 or CTLA-4. The activated protein induces T-cell proliferation and cytokine production. This protein can act as a receptor for adenovirus subgroup B and may play a role in lupus neuropathy. [provided by RefSeq, Aug 2011]</p>