

Product datasheet for SC111929

B7-2 (CD86) (NM_006889) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: B7-2 (CD86) (NM_006889) Human Untagged Clone
Tag: Tag Free
Symbol: B7-2
Synonyms: B7-2; B7.2; B70; CD28LG2; LAB72
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_006889 edited
 GAATTCGGCACGAGGGGAAGGCTTGACACAGGGTGAAGCTTTGCTTCTCTGCTGCTGTA
 AAGCAGCCAAAATGGATCCCGAGTGCACATGGGACTGAGTAACATTCTCTTTGTGATGG
 CCTTCCTGCTCTCTGGTCTGCTCCTCTGAAGATTCAAGCTTATTTCAATGAGACTGCAG
 ACCTGCCATGCCAATTTGCAAACCTCAAAAACAAAGCCTGAGTGAGCTAGTAGTATTTT
 GGCAGGACCAGGAAAACCTGGTTCTGAATGAGGTATACTTAGGCAAAGAGAAAATTTGACA
 GTGTTTCATTCCAAGTATATGGGCCGCACAAGTTTTGATTCGGACAGTTGGACCCTGAGAC
 TTCACAATCTTCAGATCAAGGACAAGGGCTTGATCAATGTATCATCCATCACAAAAGC
 CCACAGGAATGATTCGCATCCACCAGATGAATTCTGAACTGTCAGTGCTTGCTAACTTCA
 GTCAACTGAAAATAGTACCAATTTCTAATAACAGAAAATGTGTACATAAATTTGACCT
 GCTCATCTATACACGGTTACCCAGAACCTAAGAAGATGAGTGTTTTGCTAAGAACCAAGA
 ATTCAACTATCGAGTATGATGGTATTATGCAGAAATCTCAAGATAATGTCACAGAACTGT
 ACGACGTTTCCATCAGCTTGCTGTTTCATTCCCTGATGTTACGAGCAATATGACCATCT
 TCTGTATTCTGGAAACTGACAAGACGGCTTTTATCTTCACCTTTCTCTATAGAGCTTG
 AGGACCCTCAGCCTCCCCAGACCACATTCCTGGATTACAGCTGTACTTCCAACAGTTA
 TTATATGTGTGATGGTTTTCTGTCTAATTCTATGGAAATGGAAGAAGAAGAAGCGGCCTC
 GCAACTCTTATAAATGTGGAACCAACACAATGGAGAGGGAAGAGAGTGAACAGACCAAGA
 AAAGAGAAAAATCCATATACCTGAAAGATCTGATGAAGCCCAGCGTGTTTTTAAAGTT
 CGAAGACATCTTCATGCGACAAAAGTGATACATGTTTTTAATTAAGAGTAAAGCCATA
 CAAGTATTCATTTTTCTACCCTTTCTTTGTAAGTTCCTGGGCAACCTTTTTGATTTCT
 TCCAGAAGGCAAAAAGACATTACCATGAGTAATAAGGGGGCTCCAGGACTCCCTCTAAGT
 GGAATAGCCTCCCTGTAACCTCAGCTCTGCTCCGTATGCCAAGAGGAGACTTTAATTCTC
 TTAAGTCTTTTCACTTCAGAGCACACTTATGGGCCAAGCCAGCTTAATGGCTCATG
 ACCTGAAATAAAATTTAGGACCAATACCTCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAACTCGAC



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_006889 unedited</p> <pre> AGCATTTTGTAAACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGGGAAGGCTT GCACAGGGTAAAAGCTTTGCTTCTCTGCTGCTGTAAACAGGGACTAGCACAGACACACGGA TGAGTGGGGTCATTTCCAGATATTAGGTCACAGCAGAAGCAGCCAAAATGGATCCCCAGT GCACTATGGGACTGAGTAACATTCTCTTTGTGATGGCCTTCCTGCTCTCTGGTGTGCTC CTCTGAAGATTTCAAGCTTATTTCAATGAGACTGCAGACCTGCCATGCCAATTTGCAAACT CTCAAAAACCAAAGCCTGAGTGAGCTAGTATTTTGGCAGGACCAGGAAAACCTTGGTTC TGAATGAGGTATACTTAGGCAAAGAGAAAATTTGACAGTGTTCATTCCAAGTATATGGGCC GCACAAGTTTTGATTTCGACAGTTGGACCCTGAGACTTCACAATCTTCAGATCAAGGACA AGGGCTTGTATCAATGTATCATCCATCACAAAAGAGCCCACAGGAATGATTGCATCCAC CAGATGAATTCTGAACTGTCAGTGCTTGCTAACTTCAGTCAACCTGAAATAGTACCAATT TCTAATAAACAGAAAATGTGTACATAAATTTGACCTGCTCATCTATACACGGTTACCCA GAACCTAAGAAGATGAGTGTGTTGCTAAGAACCAAGAATCAACTATCGAGTATGATGGT ATTATGCAGAAAATCTCAAGATAATGTCACAGAAGTGTACGACGTTTCCATCAGCNTTGTG TGTTTCATTCCCTGATGTTACGAGCCATATGACCATCTTCTGTATTCTGGANACTGACAG ACGCGGCTTTTATCTTACCTTTCTCTATAGAGCTTGAGGACCCTCAGCCTCCCCAGACA CATTCTTGATTACAGCTGACTTNCACAGTATAATGGGGGAAGAGGGTNTCTGTCTAAT CTATGAN </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_006889 unedited</p> <pre> CCGTANGGTTATGGTCTAATTTTATTTNCCAGNTCATGNAGCCATTAAGCTGGGCTTGG NCCCATAAAGTGTCTNNTGAAGTGAAGAAAAAGCAGTAAGAGAATTAAGTCTCCTCTTG GCATACGGAGCAGAGCTGGAGTTACAGGGAGGCTATTCCACTTAGAGGGAGTCTGGAGC CCCTTATTACTCATGGTAAATGTCTTTTGCCTTCTGGAAGAAATCAAAAAGTTGCCCA GGAACCTACAAAAGAAAGGGTAGAAAAAATGAATACTTGTATGGGCTTTACTCTTTAATT AAAAACATGTATCACTTTTGTGCATGAAGATGTCTTCAACTTTTAAAAACACGCTGGG CTTCATCAGATCTTTAGGTATATGGATTTTTTCTTTTTCTTGGTCTGTTCACTCTCTT CCCTCTCCATTGTGTTGGTTCCACATTTATAAGAGTTGCGAGGCCGCTTCTTCTTCTCC ATTTCCATAGAATTAGACAGAAAACCATCACACATATAATAACTGTTGGAAGTACAGCTG TAATCCAAGGAATGTGGTCTGGGGGAGGCTGAGGGTCTCAAGCTCTATAGAGAAAGGTG AAGATAAAAGCCGCTCTTGTGAGTTTCCAGAATACAGAAGATGGTCAATTTGCTCGTAA CATCAGGGAATGAAACAGACAAGCTGATGGAAAGCTCGTACAGTTCTGTGACATTATCTT GAGATTTCTGCATAATACCATCATACTCGATAGTTGAATTCTTGGGGTCTTAGCCAAAC TCATCTTCTTTAGTGCTGGGTAACCGTGTATAGATGAGCAAGTCAAATTTATGTACACAT TTTTCTGTATATTAGAAATGGGACTATTTTCAGGTTGACTGAAGTTAGCAAGCCCTGA CAGTTCAAATTCATCTGTTGGATGCGAATCATTCTGTTGGGCTTTTGG </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_006889
Insert Size:	1440 bp
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).
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: [NM_006889.2](#), [NP_008820.1](#)

RefSeq Size: 2794 bp

RefSeq ORF: 2790 bp

Locus ID: 942

UniProt ID: [P42081](#)

Cytogenetics: 3q13.33

Domains: IGv, IG

Protein Families: Druggable Genome, Transcription Factors, Transmembrane

Protein Pathways: 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

Gene Summary: This gene encodes a type I membrane protein that is a member of the immunoglobulin superfamily. This protein is expressed by antigen-presenting cells, and it is the ligand for two proteins at the cell surface of T cells, CD28 antigen and cytotoxic T-lymphocyte-associated protein 4. Binding of this protein with CD28 antigen is a costimulatory signal for activation of the T-cell. Binding of this protein with cytotoxic T-lymphocyte-associated protein 4 negatively regulates T-cell activation and diminishes the immune response. Alternative splicing results in several transcript variants encoding different isoforms.[provided by RefSeq, May 2011]
Transcript Variant: This variant (2) includes an alternate exon in the 5' UTR, resulting in the use of a downstream start codon compared to variant 1. Isoform 2 has a shorter N-terminus than isoform 1.