

Product datasheet for **RC206540**

B7-1 (CD80) (NM_005191) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B7-1 (CD80) (NM_005191) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B7-1
Synonyms:	B7; B7-1; B7.1; BB1; CD28LG; CD28LG1; LAB7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206540 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCCACACGAGGCAGGGAACATCACCATCCAAGTGCCATACCTCAATTTCTTTCAGCTCTTGG
TGCTGGCTGGTCTTTCTCACTTCTGTTTCAGGTGTTATCCACGTGACCAAGGAAGTAAAGAAGTGGCAAC
GCTGTCTGTGGTCACAATGTTTCTGTTGAAGAGCTGGCACAACTCGCATCTACTGGCAAAGGAGAAG
AAAATGGTGCTGACTATGATGTCTGGGGACATGAATATATGGCCCGAGTACAAGAACCGGACCATCTTTG
ATATCACTAATAACCTCTCCATTGTGATCCTGGCTCTGCGCCATCTGACGAGGGCACATACGAGTGTGT
TGTTCTGAAGTATGAAAAGACGCTTTCAAGCGGGAACACCTGGCTGAAGTGACGTTATCAGTCAAAGCT
GACTTCCCTACACCTAGTATATCTGACTTTGAAATCCAACCTTCTAATATTAGAAGGATAATTTGCTCAA
CCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCTGGTTGGAAAATGGAGAAGAATTAATGCCATCAACAC
AACAGTTTCCAAGATCCTGAACTGAGCTCTATGCTGTTAGCAGCAAAGTGGATTTCAATATGACAACC
AACCACAGCTTCATGTGCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAA
CCAAGCAAGAGCATTTTCTGATAACCTGCTCCCATCTGGGCCATTACCTAATCTCAGTAAATGGAAT
TTTTGTGATATGCTGCCTGACCTACTGCTTTGCCCAAGATGCAGAGAGAGAAGGAGGAATGAGAGATTG
AGAAGGAAAGTGTACGCCCTGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC206540 protein sequence
Red=Cloning site Green=Tags(s)

MGHTRRQGTSPSKCPYLNFFQLVLVAGLSHFCSGVIHVTKEVKEVATLSCGHNVSEELAQTRIYWQKEK
 KMVLTMMSGDMNIWPEYKNRTIFDITNNLSIVILALRPSDEGTYESVVLKYEKDAFKREHLAEVTL SVKA
 DFPTPSISDFEIPTSNIRRIICSTSGGFPEPHLSWLENGEELNAINTTVSQDPETELYAVSSKLDNFNMTT
 NHSFMCLIKYGHLRVNQTFNWNTTKQEHFPDNLPSWAITLISVNGIFVICCLTYCFAPRCRERRRNERL
 RRESVRPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6287_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005191

ORF Size: 864 bp

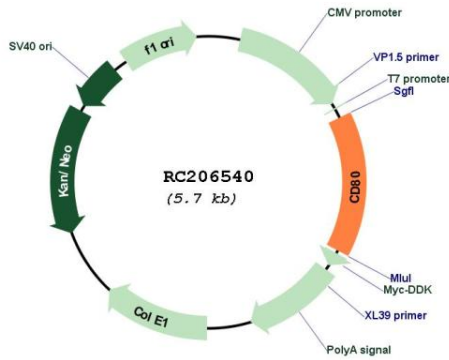
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

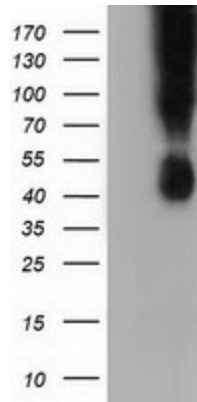
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_005191.4
RefSeq Size:	2757 bp
RefSeq ORF:	867 bp
Locus ID:	941
UniProt ID:	P33681
Cytogenetics:	3q13.33
Domains:	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
MW:	33 kDa
Gene Summary:	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]

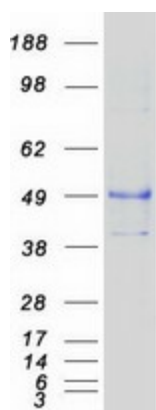
Product images:



Circular map for RC206540



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD80 (Cat# RC206540, 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-CD80 (Cat# [TA501576]).



Coomassie blue staining of purified CD80 protein (Cat# [TP306540]). The protein was produced from HEK293T cells transfected with CD80 cDNA clone (Cat# RC206540) using MegaTran 2.0 (Cat# [TT210002]).