

Product datasheet for SC119790

CD4 (NM_000616) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD4 (NM_000616) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD4
Synonyms:	CD4mut; IMD79; OKT4D
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000616 edited
 GAATTCGGCACGAGGCAGAGCTCCAAGTCCTCACACAGATACGCCTGTTTGAGAAGCAGC
 GGGCAAGAAAGACGCAAGCCAGAGCCCTGCCATTTCTGTGGGCTCAGGTCCTACTGG
 CTCAGGCCCTGCCTCCCTCGGCAAGGCCACAATGAACCGGGAGTCCCTTTTAGGCACT
 TGCTTCTGGTGCTGCAACTGGCGCTCCTCCCAGCAGCCACTCAGGGAAAGAAAGTGGTGC
 TGGGCAAAAAAGGGGATACAGTGGAACTGACCTGTACAGCTTCCCAGAAGAGAGCATA
 AATTCCACTGGAAAACTCCAACAGATAAAGATTCTGGGAAATCAGGGCTTCTTCTTAA
 CTAAAGGTCCATCCAAGCTGAATGATCGCGTGACTCAAGAAGAAGCCTTTGGGACCAAG
 GAAACTTTCCCCTGATCATCAAGAATCTTAAGATAGAAGACTCAGATACTTACATCTGTG
 AAGTGGAGGACCAGAAGGAGGAGGTGCAATTGCTAGTGTTCGGATTGACTGCCAACTCTG
 ACACCCACCTGCTTCAGGGGCAGAGCCTGACCCTGACCTTGAGAGCCCCCTGGTAGTA
 GCCCCTCAGTGCAATGTAGGAGTCCAAGGGTAAAACATACAGGGGGGAAGACCCTCT
 CCGTGTCTCAGCTGGAGCTCCAGGATAGTGGCACCTGGACATGCACTGTCTTGCAAGAAC
 AGAAGAAGGTGGAGTTCAAAATAGACATCGTGGTGTAGCTTTCCAGAAGGCCTCCAGCA
 TAGTCTATAAGAAAGAGGGGGAACAGGTGGAGTTCTCCTTCCCCTCGCCTTTACAGTTG
 AAAAGCTGACGGGCAAGTGGCGAGCTGTGGTGGCAGGCGGAGAGGGCTTCTCCTCCAAGT
 CTTGGATCACCTTTGACCTGAAGAACAAGGAAGTGTCTGTAAAACGGGTTACCCAGGACC
 CTAAGCTCCAGATGGGCAAGAAGCTCCCGCTCCACCTCACCTGCCCCAGGCCTTGCCTC
 AGTATGCTGGCTCTGAAACCTCACCTGGCCCTTGAAGCGAAAAACAGGAAAGTTGCATC
 AGGAAGTGAACCTGGTGGTGTAGAGGCACTCAGCTCCAGAAAAATTTGACCTGTGAGG
 TGTGGGGACCCACCTCCCTAAGCTGATGCTGAGTTTGAACCTGGAGAACAAGGAGGCAA
 AGGTCTCGAAGCGGGAGAAGGCGGTGTGGGTGCTGAACCTGAGGCGGGGATGTGGCAGT
 GTCTGCTGAGTACTCGGGACAGGTCTGCTGGAATCCAACATCAAGTTCTGCCACAT
 GGTCCACCCCGTGCAGCAATGGCCCTGATTGTGCTGGGGGGCGTCCCGGCCTCTGCTG
 TTTTCATTGGGCTAGGCATCTTCTTCTGTGTCAGGTGCCGGCACCGAAGGCGCCAAGCAG
 AGCGGATGTCTCAGATCAAGAGACTCCTCAGTGAGAAGAAGACCTGCCAGTGTCTCACC
 GGTTTCAGAAGACATGTAGCCCCATTTGAGGCACGAGGCCAGGCAGATCCCCTTGCAGC



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CTCCCCAGGTGTCTGCCCGCGTTTCCTGCCTGCGGACCAGATGAATGTAGCAGATCCCA
 GGCTCTGGCCTCCTGTTGCGCTCCTCTACAATTTGCCATTGTTTCTCCTGGGTTAGGCC
 CCGGCTTCACTGGTTGAGTGTGCTCTCTAGTTTCCAGAGGCTTAATCACACCGTCTCC
 ACGCCATTTCTTTTCTTCAAGCCTAGCCCTTCTCTCATATTTCTCTGACCCTCTC
 CCCACTGCTCATTGGATCCCAGGGGAGTGTTCAGGGCCAGCCCTGGCTGGCATGGAGGG
 TGAGGCTGGGTGTCTGGAAGCATGGAGCATGGGACTGTTCTTTTACAAGACAGGACCCTG
 GGACCACAGAGGGCAGGAACCTTGACAAAAATCACACAGCCAAGCCAGTCAAGGATGGATG
 CAGATCCAGAGGTTTCTGGCAGCCAGTACCTCCTGCCCATGCTGCCCGCTTCTCACCT
 ATGTGGGTGGGGCCACAGACTCACATCCTGACCTTGACAAAAACAGCCCTCTGGACACAG
 CCCCATGTACACGGCCTCAAGGGATGTCTCACATCCTCTGTCTATTTGAGACTTAGAAAA
 ATCCTACAAGGCTGGCAGTGACAGAACTAAGATGATCATCTCCAGTTTATAGACCAGAAC
 CAGAGCTCAGAGAGGCTAGATGATTGATTACCAAGTGCCGGACTAGCAAGTGTGGAGTC
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 TGCCACACGGCTCTCACCAGTGGCTAGTGGTGGTACTCAATGTGTACTTTTGGGTTTAC
 AGAAGCACAGCACCCATGGGAAGGTCCATCTCAGAGAATTTACGAGCAGGGATGAAGGC
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 AAAGCCTTTGGCTCTTCTAATCAGAGCGCAAGCTGGGAGCACAGGCACTGCAGGAGAGAA
 TGCCCACTGACCAGTCACTGACCCTGTGCAGAACCTCCTGGAAGCGAGCTTTGCTGGGAG
 AGGGGGTAGCTAGCCTGAGAGGGAACCCCTAAGGGACCTCAAAGGTGATTGTGCCAGGC
 TCTGCGCTGCCACACCCCTCCCTTACCCTCCTCCAGACCATTAGGACACAGGGAAAT
 CAGGGTTACAAATCTTCTGATCCACTTCTCTCAGGATCCCTCTCTTCTACCCTTCT
 CACCCTCCCTCAGTCCCACTCCTTTTCCCTATTTCTTCTCCTCCTGTCTTTAAAGC
 CTGCCTTCTCAGGAAGACCCCTATTGCTGCTGGGGCTCCCCATTTGCTTACTTTGCA
 TTTGTGCCCACTCTCACCCCTGCTCCCTGAGCTGAAATAAAAAATAAATAAATTAAT
 ATAAAGATGAAAAAAAAAAAAAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000616 unedited
 GGTTCAAATTTGTATACGACTCACTATAGGCGCCGCGAATCGGCACGAGGCAGAGCTCC
 AAGTCTCACACAGATACGCCTGTTTGAGAAGCAGCGGGCAAGAAAGACGCAAGCCCA
 GGCCCTGCCATTTCTGTGGGCTCAGGTCCTACTGGCTCAGGCCCTGCCTCCCTCGGCA
 AGGCCACAATGAACCGGGGAGTCCCTTTTAGGCACTTGCTTCTGGTGTGCAACTGGCGC
 TCCTCCCAGCAGCCACTCAGGAAAGAAAGTGGTGTGGGCAAAAAAGGGATACAGTGG
 AACTGACCTGTACAGTCCCAGAAAGAGCATACAATCCACTGAAAAAACTCCAACC
 AGATAAAGATTCTGGAAATCAGGGCTTCTTCTAACTAAAGGTCCATCCAAGCTGAATG
 ATCGCGCTGACTCAAGAAGAAGCCTTTGGGACCAAGGAACTTTCCCTGATCATCAAGA
 ATCTTAAGATAGAAGACTCAGATACTTACATCTGTGAAGTGGAGGACCAGAAGGAGGAG
 TGCAATTGCTAGTGTTCGGATTGACTGCCAACTCTGACACCCACCTGCTCAGGGGCAGA
 GCCTGACCCTGACCTTGAGAGCCCCCTGGTAGTAGCCCTCAGTGAATGTAGGAGTC
 CAAGGGGTAAAAACATACAGGGGGGAAGACCCTCTCCGTGTCTCAGCTGGAGCTCAGG
 ATAGTGGCACCTGGACATGCACTGTCTTGACAGAACAGAAAGTGGAGTTCAAATAG
 ACATCGTGGTGTAGCTNTCCAGAAGCCTNCAGCATAGTCTATAAGAAAGAGGGGACAG
 GTGGAGTTCTCCTTCCACTCGCCTTACCAGTAAAGCTGACGGGCANTGGCGAACTGTG
 GTGGCANGGCGGAAC

3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000616 unedited CGCTTTTAAAGTGAGTTTTTTTTTTTTTTTTTAAATCTTTATAGAAAGTTATTGTATTT TTATTTTACAGTCAGGGGAGCAGGGGTGGAGAGTGGGCACAAATGCAAAGTAAGCAAATGG GGAGCCCCAGCAGCAATAGGGGGGTCTTCCTGGAAGAGGCAGGCTTTAAAGACAGGAGGA GAAGGAAATAGGGAAAAGGAGTTGGGACTGAGGGAAGTGGTGAGGAAGGGTAGGAAGAGA GGGGATCCTGAGAGAAGTGGATCAAGAAGATTTGTAACCCTGATTTCCCTGTGCTCGAA TGGTCTGGAGGAGGTAAGGGAGGGTGTGGGGCAGGCGCATAGCCTGGCACAATCACCTT TGAGGTCCTTAGAGGGTTCCCTCTCAGGCTAGCTACCCCTCTCCAGCAAAGCTCGCT TCCAGGAGTTCTGCACAGGGTCACTGACTGGTCACTGGCATTCTCCTGCACTGCTGCT GTGCTCCAGCTTGCCTCTGATTATAAGAGCCAAAGGCTTTGACCTCTGGTAACAGATT CTGCCACCAGCGGGGATGAAGGAGGGATTTAGACAGGGAGGCCTTCATCCCTGCTCGA AAATTCTCTGAGATGGACCCTTCCCATGGGTGCTGTGCTTCTGTGAACCCATAAGCACAC ATTGAGTACCCACCCTACCCACTGGTGGAGAGCCGTGCGGCATTTGACCCTGCCTTCAA GAAGCAATAGTGGAACTGGGACAAGGACCTGGGTACCTCCGACTCAACACCTTGCTAT ACGGCCCTCGCGCATAATCTTTTACCTCTTAGCCTCTGCTCCGATTTTTCCCGCGCAG TCTCCCTCCCTCCTTGCCCTCCCTTTTCTACCCACCTTCTATTTTCCCTCCCTCCT CGTCTCCCTCGACCTTTTCTTCTCTCCCATCTTCTCCCTCCTCCCCCTCCCCCT CCCCCTCGTCTCTCCCTCCAT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_000616
Insert Size:	3070 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:	<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.
RefSeq:	<u>NM_000616.2</u> , <u>NP_000607.1</u>
RefSeq Size:	3084 bp
RefSeq ORF:	1377 bp
Locus ID:	920
UniProt ID:	<u>P01730</u>
Cytogenetics:	12p13.31
Domains:	ig, IGv, IGc2, IG

Protein Families:	Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transmembrane
Protein Pathways:	Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway
Gene Summary:	<p>This gene encodes the CD4 membrane glycoprotein of T lymphocytes. The CD4 antigen acts as a coreceptor with the T-cell receptor on the T lymphocyte to recognize antigens displayed by an antigen presenting cell in the context of class II MHC molecules. The CD4 antigen is also a primary receptor for entry of the human immunodeficiency virus through interactions with the HIV Env gp120 subunit. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, granulocytes, as well as in various regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, May 2020]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (1) including a signal peptide and a mature peptide. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>