

Product datasheet for **SC124031**

CD11a (ITGAL) (NM_002209) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD11a (ITGAL) (NM_002209) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD11a
Synonyms:	CD11A; LFA-1; LFA1A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC124031 sequence for NM_002209 edited (data generated by NextGen Sequencing)

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ATGAAGGATTCCATCACTGTGATGGCCATGGCGCTGTCTGGGTTCTTTTCTTC
GCGCCGGCCTCGAGCTACAACCTGGACGTGCGGGGCGCGGGAGCTTCTCCACCGCGC
GCCGGGAGGCACTTTGGATACCGCGTCCTGCAGGTCGAAACGGGGTCATCGTGGGAGCT
CCAGGGGAGGGAAACAGCACAGGAAGCCTCTATCAGTGCCAGTCGGGCACAGGACTGC
CTGCCAGTCACCTGAGAGGTTCCAACATACTCCAAGTACTTGGGAATGACCTTGGA
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CAGAACACCTATCTGAGTGGCCTGTGTTACCTCTCCGCCAGAATCTGCAGGGTCCCATG
CTGCAGGGGCGCCTGGTTTTCCAGGAATGTATCAAGGGCAACGTAGACCTGGTATTTCTG
TTTGATGGTTCGATGAGCTTGCAGCCAGATGAATTTCCAGAAAATCTGGACTTCATGAAG
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GGTGGGGAGCTGTGTGGCGTCGACGTGGACCAAGATGGGGAGACAGAGCTGCTGCTGATT
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GAGCAGCTGGCATCTGGGCAAGAGGCTGGGGATCCCGGCTGCCTGAAGCCCTCCATGAG
AAGGACTCTGAGAGTGGTGGTGGCAAGGACTGA
    
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Clone variation with respect to NM_002209.2

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_002209 unedited
ACTGACTATAGGGCGGCCGGAATTCGGCACGAGGTTGCCAGCAAATCCCACGGCCTCC
TGACGCTGCCCTGGGGCCACAGGTCCTCGAGTGTGGAAGGATGAAGGATTCCTGCAT
CACTGTGATGGCCATGGCGCTGCTGTGGGTTCTTTTCTTCGCGCCGGCCTCGAGCTA
CAACCTGGACGTGCGGGGCGCGGAGCTTCTCCACCGCGCGCCGGGAGGCACTTTGG
ATACCGCGTCTGCAAGTCGAAACGGGGTTCATCGTGGGAGCTCCAGGGGAGGGGAACAG
CACAGGAAGCCTATACAGTGCCAGTCCGGCACAGGACTGCCTGCCAGTACCCTGAG
AGGTTCCAACATACCTCCAAGTACTTGGGAATGACCTTGGCAACAGACCCACAGATGG
AAGCATTTTGGCCTGTGACCCTGGGCTGTCTCGAACGTGTACCAGAACACCTATCTGAG
TGGCCTGTGTTACCTCTTCCGCCAGAATCTGCAGGGTCCCATGCTGCAGGGGCGCCCTGG
TTTTCAGGAATGTATCAAGGGCAACGTAGACCTGGTATTTCTGTTTGATGGTTCGATGAG
CTTGACGAGCAGATGAATTTAGAAAATTCTGGACTTTCATGAAGGATGTGATGAAGAACT
CAGCAACACTTCTGACAGTTTGTCTGCTGTTTCTCAGTTTTTCAAGCTACANAACAGAATT
TGATTTCTCAGATTAT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002209 unedited CGGCCGGAGAGCACTTGGNAAGGTCACAAGNATGCCACCCAGGATCTGTTTCAGGAAACAG CTATGACCGCAGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTCTTGAGACGGAG TCTCGTGTGTTGCCAAGCTGGAGTGCAATGGCNCAATCTTGGCTNANTGNANCCTCCA CCTCCCAGGTTCAAGCAATCTCCTACCTCAACCTCCTGAGTAGCTGGGACTACAGGTGT GTGCCACCACGCCTGGGTTTTGTATTTTAGTAAAGATGGGGTTTCGCCAGGCTGGCCTC TAACTCCTGACCTCAAGTGATCCACCCTCCTTGGCCTCCCAAAGTGCTGGGATTACAGGC GTGAACCACCGCCAGCCAGCCCTCTTTTCTGTATCTTCCCACTGGCTCTGTCAT TAATTCAGTGAAATTATGTCAAGCACCTACTAGATGTCCACGCCTGACATATCATGAG GCATCATTCCCAGGTGAACAAGACAAGTTAGCCTTTACCCTCACAGTTCAGTACAGAT AGCTGCTAAGTACGTTTCATCATTAAACAGGGAAAAAACATCCAAGCTGCCNGATGAAGAA CCATGACGTGTGCTTTGAGGGAGTAGTGCAAGCTGGTGGAAAGTGAAAGATGTGAGGAC CCACCAAGTGTGACACTGACTGGGATCTCCTGGTCAAAGAAAGGGGTGCCAAACTGA AGGTTTCAGCAAAGGC
Restriction Sites:	NotI-NotI
ACCN:	NM_002209
Insert Size:	4900 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_002209.1</u> , <u>NP_002200.1</u>
RefSeq Size:	5133 bp
RefSeq ORF:	3513 bp
Locus ID:	3683
UniProt ID:	<u>P20701</u>
Cytogenetics:	16p11.2
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, Viral myocarditis

Gene Summary:

ITGAL encodes the integrin alpha L chain. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form the integrin lymphocyte function-associated antigen-1 (LFA-1), which is expressed on all leukocytes. LFA-1 plays a central role in leukocyte intercellular adhesion through interactions with its ligands, ICAMs 1-3 (intercellular adhesion molecules 1 through 3), and also functions in lymphocyte costimulatory signaling. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a).