

Product datasheet for **RG221297**

CD11a (ITGAL) (NM_002209) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD11a (ITGAL) (NM_002209) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD11a
Synonyms:	CD11A; LFA-1; LFA1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221297 representing NM_002209 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGATTCCTGCATCACTGTGATGGCCATGGCGCTGCTGTGGTTCTTTTTCTTCGCGCCGGCCT
CGAGCTACAACCTGGACGTGCGGGGCGCGGGAGCTTCTCCCCACCGCGCCGGGAGGCCTTTGGATA
CCGCGTCTGCAGGTCGAAACGGGTCATCGTGGGAGCTCCAGGGAGGGGAACAGCACAGGAAGCCTC
TATCAGTGCCAGTCGGGCACAGGACACTGCCTGCCAGTACCCTGAGAGGTTCCAACATACTCCAAGT
ACTTGGGAATGACCTTGGCAACAGACCCACAGATGGAAGCATTTGGCCTGTGACCCTGGGCTGTCTCG
AACGTGTGACCAGAACACCTATCTGAGTGGCCTGTGTTACCTCTCCGCCAGAATCTGCAGGGTCCCATG
CTGCAGGGGCGCCCTGGTTTTTCAGGAATGTATCAAGGGCAACGTAGACCTGGTATTTCTGTTGATGGTT
CGATGAGCTTGCAGCCAGATGAATTTTCAGAAAATCTGGACTTCAAGGATGTGATGAAGAACTCAG
CAACACTTCGTACCAGTTTGTCTGCTGTTTCCACAAGCTACAAAACAGAAATTTGATTTCTCAGAT
TATGTTAAATGGAAGACCCTGATGCTCTGCTGAAGCATGTAAGCACATGTTGCTGTTGACCAATACCT
TTGGTGCCATCAATTATGTCGCGACAGAGGTGTTCCGGGAGGAGCTGGGGCCCGCCAGATGCCACAA
AGTGCTTATCATCATCAGGATGGGAGGCCACTGACAGTGGCAACATCGATGCGCCAAAGACATCATC
CGCTACATCATCGGATTGGAAAGCATTTTCAGACCAAGGAGAGTCAGGAGACCTCCACAAATTTGATC
CAAAACCCGCGAGCGAGTTTGTGAAAATCTGGACACATTTGAGAAGCTGAAAGATCTATTTACTGAGCT
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CGACGTGGACCAAGATGGGGAGACAGAGCTGCTGCTGATTGGTGGCCACTGTTCTATGGGGAGCAGAGA



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GGAGGCCGGGTGTTTATCTACCAGAGAAGACAGTTGGGGTTTGAAGAAGTCTCAGAGCTGCAGGGGGACC
CCGGTACCCACTCGGGCGGTTTGGAGAAGCCATCACTGCTCTGACAGACATCAACGGCGATGGGCTGGT
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CTGGGGGGACTCGGTTGAATTGCACGCCAATGTGACCTGTAACAATGAGGACTCAGACCTCTGGAGGAC
AACTCAGCCACTACCATCATCCCATCTGTACCCCATCAACATCCTCATCCAGGACCAAGAAGACTCCA
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TGGCCAGGTTGTGATGAAGTTGACGTGGTGTATGAGAAGCAGATGCTCTACCTCTACGTGCTGAGCGG
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CTGAAGGAGAAGATGGAGGCTGGCAGAGGTGCCGAATGGAATCCCTGCAGAAGACTCTGAGCAGCTGG
CATCTGGCAAGAGGCTGGGGATCCCGGCTGCCTGAAGCCCTCCATGAGAAGGACTCTGAGAGTGGTGG
TGGCAAGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221297 representing NM_002209
 Red=Cloning site Green=Tags(s)

MKDSCITVMAMALLSGFFFFAPASSYNLDVRGARSFSPPRAGRHFgyrvlqvngvIVGAPGEGNSTGSL
 YQCQSGTGHLCPVTLRGSNYTSKYLGMTLATDPTDGSILACDPGLSRTCDQNTYLSGLCYLFRQNLQGPM
 LQGRPGFQECIKGNVDL VFLFDGSM LQPDEFQKILDFMKDVMKKLSNTSYQFAAVQFSTSYKTEFDSD
 YVKWKDPDALLKHVKHMLLLTNTFGAINYVATEVFREELGARPDA TKVLIITDGEATDSGNIDAAKDII
 RYIIGIGKHFQTKESQETLHKFASKPASEFVKILDTFEKLDLFTLQKKIYVIEGTSKQDLTSFNMELS
 SSGISADLSRGHAVVGVGAKDWAGGFLDLKADLQDDTFIGNPLTPEVRAGYLGYTVTWPSPRQKTSLL
 ASGAPRYQHMGRVLLFQEPQGGGHSVQVQTIHGTQIGSYFGGELCGVDVDQDGETELLLIGAPLFYGEQR
 GGRVFIYQRRQLGFEVSELQGDPGYPLGRFGEAITALTDINGDGLVDVAVGAPLEEQAVYIFNGRHGG
 LSPQPSQRIEGTQVLSGIQWFGRSIHGVKDLGEGDLADVAVGAESQMIVLSSRPVDMVMTLSMSPAEP
 VHEVECSYSTSNKMKEGVNITICFQIKSLYPQFQGRLVANLTYTLQLDGHRTRRRGLFPGGRHELRRNIA
 VTTSMSC TDFSFHFPVCVDLISPINVS LNFSLWEEEGTPRDQRAQGDIPPILRPSLHSETWEIPFEKN
 CGEDKKEANLRVSFSPARSRALRLTAFASLSVELSLSNLEEDAYWVQLDLHFPPGLSFRKVEMLKPHSQ
 IPVSC EELPEESRLLSRALSCNVSSPIFKAGHSVALQMMFNTLVNSSWGDVSELHANVTCNNEDSDLLED
 NSATTIIPILYINILIQDQEDSTLYVSFTPKGPKIHQVKHMYQVRIQPSIHDHNIPTLEAVVGVQPPS
 EGPITHQWSVQMEPPVPCHEYEDLERLPDAAEPCLPALFRCPVFRQEILVQVIGTLELVEIEASSMFS
 LCSSLISFNSSKHFLYGSNASLAQVVMKVDVVEKQMLYLVLVSGIGGLLLLLLIFIVLYKVGFFKRN
 LKEKMEAGRGVPNGI PAEDSEQLASGQEA GDPGCLKPLHEKDSSEGGGKD

TRTRPLE - GFP Tag - V

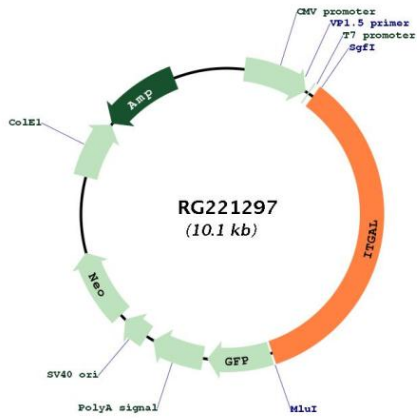
Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_002209
 ORF Size: 3510 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_002209.1 , NP_002200.1
RefSeq Size:	5133 bp
RefSeq ORF:	3513 bp
Locus ID:	3683
UniProt ID:	P20701
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]

Product images:



Circular map for RG221297