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Product datasheet for RC221743

CD11b (ITGAM) (NM_000632) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD11b (ITGAM) (NM_000632) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD11b
Synonyms:	CD11B; CR3A; MAC-1; MAC1A; MO1A; SLEB6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221743 representing NM_000632
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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Protein Sequence:

>RC221743 representing NM_000632
Red=Cloning site Green=Tags(s)

MALRVLLLTALTLCHGFNLDTENAMTFQENARGFGQSVVQLQGSRVVVGAPQEIVAANQRGSLYQCDYST
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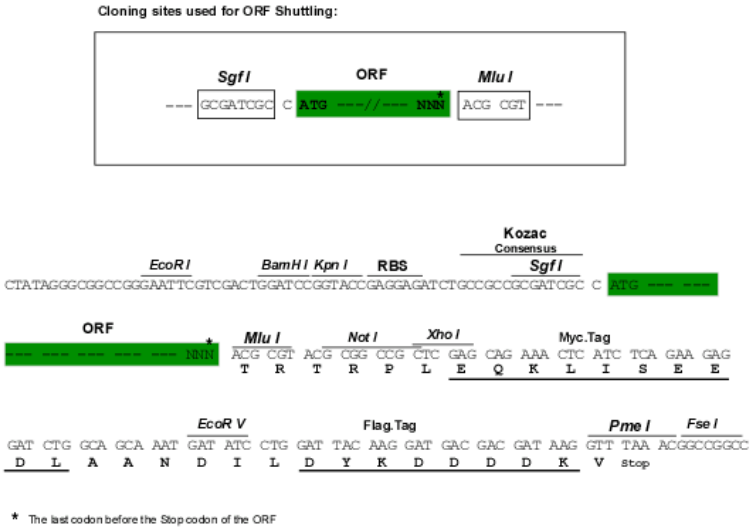
Chromatograms: https://cdn.origene.com/chromatograms/mg2755_e09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

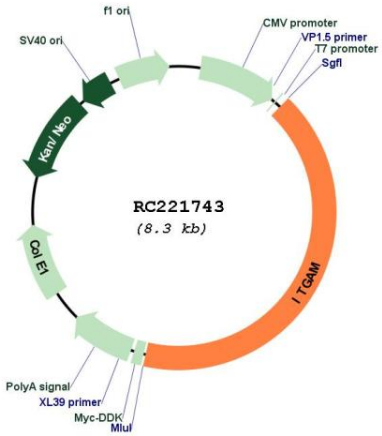


ACCN: NM_000632

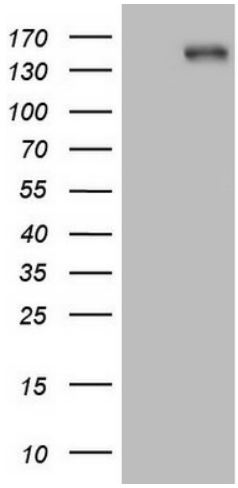
ORF Size: 3456 bp

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:	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_000632.4
RefSeq Size:	4740 bp
RefSeq ORF:	3459 bp
Locus ID:	3684
UniProt ID:	P11215
Cytogenetics:	16p11.2
Domains:	FG-GAP, VWA
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Hematopoietic cell lineage, Leukocyte transendothelial migration, Regulation of actin cytoskeleton
MW:	127.18 kDa
Gene Summary:	This gene encodes the integrin alpha M 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 a leukocyte-specific integrin referred to as macrophage receptor 1 ('Mac-1'), or inactivated-C3b (iC3b) receptor 3 ('CR3'). The alpha M beta 2 integrin is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

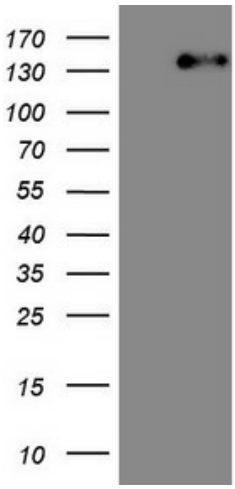
Product images:



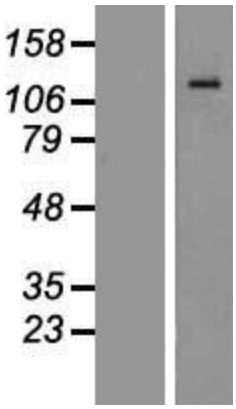
Circular map for RC221743



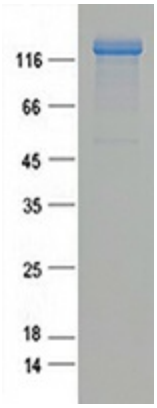
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ITGAM (RC221743, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ITGAM (1:500) ([TA807952]). Positive lysates [LY424601] (100ug) and [LC424601] (20ug) can be purchased separately from OriGene.



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ITGAM (Cat# RC221743, 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-ITGAM (Cat# [TA807953])(1:500). Positive lysates [LY424601] (100ug) and [LC424601] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424601]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221743 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGAM protein (Cat# [TP321743]). The protein was produced from HEK293T cells transfected with ITGAM cDNA clone (Cat# RC221743) using MegaTran 2.0 (Cat# [TT210002]).