Datasheet for ABIN3132527

CD11b Protein (AA 17-1153) (rho-1D4 tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	CD11b (ITGAM)
Protein Characteristics:	AA 17-1153
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD11b protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	FNLDTEHPMT FQENAKGFGQ NVVQLGGTSV VVAAPQEAKA VNQTGALYQC DYSTSRCHPI PLQVPPEAVN MSLGLSLAVS TVPQQLLACG PTVHQNCKEN TYVNGLCYLF GSNLLRPPQQ FPEALRECPQ QESDIVFLID GSGSINNIDF QKMKEFVSTV MEQFKKSKTL FSLMQYSDEF RIHFTFNDFK RNPSPRSHVS PIKQLNGRTK TASGIRKVVR ELFHKTNGAR ENAAKILVVI TDGEKFGDPL DYKDVIPEAD RAGVIRYVIG VGNAFNKPQS RRELDTIASK PAGEHVFQVD NFEALNTIQN QLQEKIFAIE GTQTGSTSSF EHEMSQEGFS ASITSNGPLL GSVGSFDWAG GAFLYTSKDK VTFINTTRVD SDMNDAYLGY ASAVILRNRV QSLVLGAPRY QHIGLVVMFR ENFGTWEPHT SIKGSQIGSY FGASLCSVDM DADGNTNLIL IGAPHYYEKT RGGQVSVCPL PRGRARWQCE ALLHGDQGHP WGRFGAALTV LGDVNGDKLT DVAIGAPGEQ ENQGAVYIFY GASIASLSAS HSHRIIGAHF SPGLQYFGQS LSGGKDLTMD GLMDLAVGAQ GHLLLLRAQP VLRLEATMEF SPKKVARSVF ACQEQVLKNK DAGEVRVCLR VRKNTKDRLR EGDIQSTVTY DLALDPVRSR IRAFFDETKN NTRRRTQVFG LMQKCETLKL ILPDCVDDSV SPIILRLNYT

LVGEPLRSFG NLRPVLAMDA QRFFTAMFPF EKNCGNDSIC QDDLSITMSA MGLDTLVVGG PQDFNMSVTL RNDGEDSYGT QVTVYYPSGL SYRKDSASQN PLTKKPWFVK PAESSSSSEG HGALKSTTWN INHPIFPANS EVTFNVTFDV DSHASFGNKL LLKAIVASEN NMSRTHKTKF QLELPVKYAI YMIVTSDESS IRYLNFTASE MTSKVIQHQY QFNNLGQRSL PVSVVFWIPV QINNVTVWDH PQVIFSQNLS SACHTEQKSP PHSNFRDQLE RTPVLNCSVA VCKRIQCDLP SFNTQEIFNV TLKGNLSFDW YIKTSHGHLL LVSSTEILFN DSAFALLPGQ ESYVRSKTET KVEPYEVHNP VPLIVGSSIG GLVLLALITA GLYKLGFFKR QYKDMMNEAA PQDAPPQ

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Itgam Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their

Product Details

	rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	CD11b (ITGAM)
Alternative Name:	Itgam (ITGAM Products)
Background:	Integrin alpha-M/beta-2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles. It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin alpha-M/beta-2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Alpha-M/beta-2 play a critical role in mast cell development and in immune complex-mediated glomerulonephritis. Mice expressing a null mutation of the alpha-M subunit gene demonstrate increase in neutrophil accumulation, in response to a impaired degranulation and phagocytosis, events that apparently accelerate apoptosis in neutrophils. These mice develop obesity.
Molecular Weight:	127.0 kDa Including tag.
UniProt:	P05555
Pathways:	Apoptosis, Activation of Innate immune Response, Toll-Like Receptors Cascades, Activated T Cell Proliferation

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.

Application Details

Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)