

Datasheet for ABIN3133394
ITGAL Protein (AA 24-1163) (rho-1D4 tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ITGAL
Protein Characteristics:	AA 24-1163
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ITGAL protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	YNLDTRPTQS FLAQAGRHFG YQVLQIEDGV VVGAPGEGDN TGGLYHCRTS SEFCQPVSLH GSNHTSKYLG MTLATDAAKG SLLACDPGLS RTCDQNTYLS GLCYLFPQSL EGPMLQNRPA YQECMKGKVD LVFLFDGSQS LDRKDFEKIL EFMKDVMRKL SNTSYQFAAV QFSTDRCRTEF TFLDYVKQNK NPDVLLGSVQ PMFLLTNTFR AINYVVAHV KEESGARPDATKVLVIITDG EASDKGNISA AHDITRYIIG IGKHFVSVQK QKTLHIFASE PVEEFVKILD TFEKLKDLFT DLQRRYIAIE GTNRQDLTSF NMELSSSGIS ADLSKGHAVV GAVGAKDWAG GFLDLREDLQ GATFVGQEPL TSDVRGGYLG YTVAWMTSRS SRPLLAAGAP RYQHVGQVLL FQAPEAGGRW NQTQKIEGTQ IGSYFGGELC SVDLDQDGEA ELLIGAPLF FGEQRGGRVF TYQRRQSLFE MVSELQGDPG YPLGRFGAAI TALTDINGDR LTDVAVGAPL EEQGAUYIFN GKPGGLSPQP SQRIQGAQVF PGIRWFGRSI HGVKDLGGDR LADVVGAEGRVVLSSRPV VDVVTELSFS PEEIPVHEVE CSYSAREEQK HGVKCLKACFR IKPLTPQFQG RLLANLSYTL QLDGHRMRSR GLFPDGSHEL SGNTSITPDK SCLDFHFHFP ICIQDLISPI NVSLNFSLE EEGTPRDQKG RAMQPILRPS
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IHTVTKEIPF EKNCGEDKKC EANLTLSSPA RSGPLRLMSS ASLAVEWTLS NSGEDAYWVR
LDLDFPRGLS FRKVEMLQPH SRMPVSCEEL TEGSSLLTKT LKCNVSSPIF KAGQEVSLQV
MFNTLLNSSW EDFVELNGTV HCENENSSLQ EDNSAATHIP VLYPVNLTKEQENSTLYIS
FTPKGPKTQQ VQHVVYQVRIQ PSAYDHNMPPT LEALVGVPWP HSEDPITYTW SVQTDPLVTC
HSEDLKRPSS EAEQPCLPGV QFRCPIVFRR EILIQVTGTV ELSKEIKASS TLSLCSLSV
SFNSSKHFFL YGSKASEAQV LVKVDLIHEK EMLHVVYVLSG IGGLVLLFLI FLALYKVGFF
KRNLKEKMEA DGGVPNGSPP EDTDPLAVPG EETKDMGCLE PSGRVTRTKA

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 Itgal 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 receipt 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 fractionated 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:	ITGAL
Alternative Name:	Itgal (ITGAL Products)
Background:	<p>Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4 (PubMed:2051027). Integrin alpha-L/beta-2 is also a receptor for F11R (By similarity). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity. Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:16234355, PubMed:24158516). Required for generation of common lymphoid progenitor cells in bone marrow, indicating the role in lymphopoiesis (PubMed:25108025). Integrin alpha-L/beta-2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages. {ECO:0000250 UniProtKB:P20701, ECO:0000269 PubMed:16234355, ECO:0000269 PubMed:2051027, ECO:0000269 PubMed:24158516, ECO:0000269 PubMed:25108025}.</p>
Molecular Weight:	126.9 kDa Including tag.
UniProt:	P24063
Pathways:	Activated T Cell Proliferation , Integrin Complex

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 guarantee though.
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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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process