

Datasheet for ABIN3135454  
**ITGA6 Protein (AA 24-1091) (rho-1D4 tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	ITGA6
Protein Characteristics:	AA 24-1091
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ITGA6 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence:	<p>FNLDTREDNV IRKSGDPGSL FGFLAMHWQ LQPEDKRLLL VGAPRAEALP LQRANRTGGL YSCDITSRGP CTRIEFDNDA DPMSESKEDQ WMGVTVQSQG PGGKVVTCAL RYEKRQHVNT KQESRDIFGR CYVLSQNLRI EDDMDGGDWS FCDGRLRGHE KFGSCQQGVA ATFTKDFHYI VFGAPGTYNW KGIVRVEQKN NTFFDMNIFE DGPYEVGGET DHDESLVPVP ANSYLGFSLD SGKGIVSKDD ITFVSGAPRA NHSGAVLLK RDMKSAHLLP EYIFDGEGLA SSFGYDVAVV DLNADGWQDI VIGAPQYFDR DGEVGGAVYV YINQQGKWSN VKPIRLNGTK DSMFGISVKN IGDINQDGYD DIAVGAPYDD LGKVFIYHGS PTGIITKPTQ VLEGTSFYFG YSIAGNMDLD RNSYPDLAVG SLSDSVTIFR SRPVINILKT ITVTPNRIDL RQKSMCGSPS GICLKVKACF EYTAKPSGYN PPISILGILE AEKERRKSGS SSRVQFRNQG SEPKYTQELT LNRQKQRACM EETLWLQENI RDKLRPIPT ASVEIQEPSS RRRVNSLPEV LPILNSNEAK TVQTDVHFLK EGCGDDNVCN SNLKLEYKFG TREGNQDKFS YLPIQKGIPE LVLKDQKDIA LEITVTNSPS DPRNPRKDGD DAHEAKLIAT FPDTLTYSAY RELRAFPEKQ LSCVANQNGS QADCELGPNP</p>
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KRNSSVTFYL ILSTTEVTFD TTDLDINLKL ETTSNQDNLA PITAKAKVVI ELLLSVSGVA  
KPSQVYFGGT VVGEQAMKSE DEVGSLIEYE FRVINLGKPL KNLGTATLNI QWPKEISNGK  
WLLYLMKVES KGLEQIVCEP HNEINYLLKLK ESHNSRKKRE LPEKQIDDSR KFSLFPERKY  
QTLNCSVNVR CVNIRCPLRG LDSKASLVLR SRLWNSTFLE EYSKLNLYDI LLRASIDVTA  
AAQNIKLPFA GTQVRVTVFP SKTVAQYSGV AWWIILLAVL AGILMLALLV FLLWKCGFFK  
RSRYDDSIPIR YHAVRIRKEE REIKDEKHMD NLEKKQWITK WNENESYS

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Itga6 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.

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### 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 rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate

## Product Details

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: ITGA6

Alternative Name: Itga6 ([ITGA6 Products](#))

Background: Integrin alpha-6/beta-1 is a receptor for laminin on platelets. Integrin alpha-6/beta-4 is a receptor for laminin in epithelial cells and it plays a critical structural role in the hemidesmosome (PubMed:8673141). ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling. ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (By similarity). {ECO:0000250|UniProtKB:P23229, ECO:0000269|PubMed:8673141}.

Molecular Weight: 121.0 kDa Including tag.

UniProt: [Q61739](#)

Pathways: [CXCR4-mediated Signaling Events](#), [Brown Fat Cell Differentiation](#), [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.

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