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# ITGA3 Protein (AA 33-874) (rho-1D4 tag)



**Image** 



#### Overview

Quantity:	1 mg
Target:	ITGA3
Protein Characteristics:	AA 33-874
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ITGA3 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

## **Product Details**

Sequence:

FNLDTRFLVV KEAVNPGSLF GYSVALHRQT ERQQRYLLLA GAPRDLAVGD DYTNRTGAVY LCPLTAHKDD CERMDISEKS DPDHHIIEDM WLGVTVASQG PAGRVLVCAH RYTKVLWSGL EDQRRMVGKC YVRGNDLQLD PGDDWQTYHN EMCNSNTDYL QTGMCQLGTS GGFTQNTVYF GAPGAYNWKG NSYMIQRKDW DLSEYSYRGS EEQGNLYIGY TVQVGNAILH PTDIITVVTG APRHQHMGAV FLLKQESGGD LQRKQVLKGT QVGAYFGSAI ALADLNNDGW QDLLVGAPYY FERKEEVGGA VYVFMNQAGA SFPDQPSLLL HGPSRSAFGI SIASIGDINQ DGFQDIAVGA PFEGLGKVYI YHSSSGGLLR QPQQIIHGEK LGLPGLATFG YSLSGKMDVD ENLYPDLLVG SLSDHIVLLR ARPVINILHR TLVARPAVLD PALCTATSCV QVELCFAYNQ SAGNPNYRRN ITLAYTLEAD RDRRPPRLRF ARSQSSVFHG FFSMPETHCQ TLELLLMDNV RDKLRPIVIA MNYSLPLRMP DRLKLGLRSL DAYPVLNQAQ AMENHTEVHF QKECGPDNKC DSNLQMRAAF LSEQLQPLSR LQYSRDTKKL FLSINVTNSP SSQRAGEDAH EALLTLEVPS ALLLSSVRPS GTCQANNETI LCELGNPFKR NQRMELLIAF EVIGVTLHTR DLPVLLQLST SSHQDNLQPV

LLTLQVDYTL QASLSLMNHR LQSFFGGTVM GEAAMKTAED VGSPLKYEFQ VSPVGDGLAA LGTLVLGLEW PYEVTNGKWL LYPTEITIHS NGSWPCQPSG NLVNPLNLTL SDPGVTPLSP QR 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 Itga3 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 rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
- 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.

# **Product Details** Sterility: 0.22 µm filtered Protein is endotoxin-free. Endotoxin Level: Grade: Crystallography grade **Target Details** ITGA3 Target: Alternative Name: Itga3 (ITGA3 Products) Background: Integrin alpha-3/beta-1 is a receptor for fibronectin, laminin, collagen, epiligrin, thrombospondin and CSPG4. Integrin alpha-3/beta-1 provides a docking site for FAP (seprase) at invadopodia plasma membranes in a collagen-dependent manner and hence may participate in the adhesion, formation of invadopodia and matrix degradation processes, promoting cell invasion. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration. {ECO:0000250|UniProtKB:P26006}. Molecular Weight: 94.3 kDa Including tag. UniProt: Q62470 Pathways: CXCR4-mediated Signaling Events, Integrin Complex **Application Details** In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:** as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee 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.

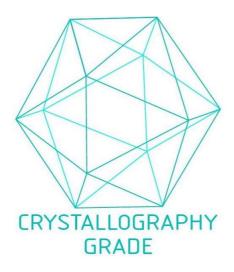
Avoid repeated freeze-thaw cycles.

Handling Advice:

# Handling

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