

Datasheet for ABIN3137241

SLAMF6 Protein (AA 31-351) (rho-1D4 tag)



Overview

Quantity:	1 mg
Target:	SLAMF6
Protein Characteristics:	AA 31-351
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLAMF6 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

Product Details

Sequence:

EVSQSSSDPQ LMNGVLGESA VLPLKLPAGK IANIIIWNYE WEASQVTALV INLSNPESPQ
IMNTDVKKRL NITQSYSLQI SNLTMADTGS YTAQITTKDS EVITFKYILR VFERLGNLET
TNYTLLLENG TCQIHLACVL KNQSQTVSVE WQATGNISLG GPNVTIFWDP RNSGDQTYVC
RAKNAVSNLS VSVSTQSLCK GVLTNPPWNA VWFMTTISII SAVILIFVCW SIHVWKRRGS
LPLTSQHPES SQSTDGPGSP GNTVYAQVTR PMQEMKIPKP IKNDSMTIYS IVNHSREETV
ALTGYNQPIT LKVNTLINYN S

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a

Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Slamf6 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).

special request, please contact us.

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.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

Target Details

Target: SLAMF6

Alternative Name:

Slamf6 (SLAMF6 Products)

Background:

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2 (PubMed:19648922). Triggers cytolytic activity only in natural killer cells (NK) expressing high surface densities of natural cytotoxicity receptors (By similarity). Positive signaling in NK cells implicates phosphorylation of VAV1. NK cell activation seems to depend on SH2D1B and not on SH2D1A (By similarity). In conjunction with SLAMF1 controls the transition between positive selection and the subsequent expansion and differentiation of the thymocytic natural killer T (NKT) cell lineage (PubMed:18031695). Promotes T cell differentiation into a helper T-cell Th17 phenotype leading to increased IL-17 secretion, the costimulatory activity requires SH2D1A (By similarity). Promotes recruitment of RORC to the IL-17 promoter (By similarity). In conjunction with SLAMF1 and CD84/SLAMF5 may be a negative regulator of the humoral immune response (PubMed:25926831). In the absence of SH2D1A/SAP can transmit negative signals to CD4(+) T-cells and NKT cells. Negatively regulates germinal center formation by inhibiting T-cell:B-cell adhesion, the function probably implicates increased association with PTPN6/SHP-1 via ITSMs in absence of SH2D1A/SAP (PubMed:22683125). However, reported to mediated T-cell adhesion, to participate in stable Tcell:B-cell interactions and to be involved in maintaining B-cell tolerance in germinal centers and in preventing autoimmunity (PubMed:20153220, PubMed:25801429). Involved in regulation of autoimmunity. Isoform 3 may be suppressor of pathogenic T-cell proliferation (PubMed:21422172). {ECO:0000250|UniProtKB:Q96DU3, ECO:0000269|PubMed:18031695, ECO:0000269|PubMed:19648922, ECO:0000269|PubMed:20153220, ECO:0000269|PubMed:21422172, ECO:0000269|PubMed:22683125, ECO:0000269|PubMed:25801429}.

Molecular Weight:

36.6 kDa Including tag.

UniProt:

Q9ET39

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
Format: Buffer:	Liquid 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
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Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Buffer: Handling Advice:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer. Avoid repeated freeze-thaw cycles.