

Datasheet for ABIN3096247
VAV3 Protein (AA 1-847) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	VAV3
Protein Characteristics:	AA 1-847
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VAV3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	MEPWKQCAQW LIHCKVLPTN HRVTWDSAQV FDLAQTLRDG VLLCQLLNNL RAHSINLKEI NLRPQMSQFL CLKNIRTFLLT ACCETFGMRK SELF EAFDLF DVRDFGKVE TLSRLSRTPI ALATGIRPPF TEESINDEDI YKGLPDLIDE TLVEDEEDLY DCVYGEDEGG EVYEDLMKAE EAHQPKCPEN DIRSCCLAEI KQTEEKYTET LESIEKYFMA PLKRFLTAAE FDSVFINIPE LVKLHRNLMQ EIHDSIVNKN DQNLVQVFIN YKERLVIYQG YCSGVESAIS SLDYISKKE DVKLKLEECs KRANNGKFTL RDLLVVPMPQ VLKYHLLLQE LVKHTTDPTE KANLKLALDA MKDLAQYVNE VKRDNETLRE IKQFQLSIEN LNQPVLFFGR PQGDGEIRIT TLDKHTKQER HIFLFDLAVI VCKRKGDNYE MKEIIDLQQY KIANNPTTDK ENKKWSYGFY LIHTQGQNGL EFYCKTKDLK KKWLEQFEMA LSNIRPDYAD SNFHDFKMHT FTRVTSCKVC QMLLRGTFYQ GYLCFKCGAR AHKECLGRVD NCGRVNSGEQ GTLKLPEKRT NGLRRTPKQV DPGLPKMQVI RNYSGTPPPA LHEGPPLQLQ AGDTVLLKG DAHSLFWQGR NLASGEVGFF PSDAVKPCPC VPKPVYDSCQ PWYAGAMERL QAETELINRV NSTYLVRHRT KESGEYAISI KYNNEAKHIK
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ILTRDGFFHI AENRKFKSLM ELVEYYKHHS LKEGFRTLDT TLQFPYKEPE HSAGQQRGNRA
GNSLLSPKVL GIAIARYDFC ARDMRELSLL KGDVVKIYTK MSANGWWRGE VNGRVGVWFPS
TYVEEDE

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.
- Human VAV3 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:

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

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. 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

Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: VAV3

Alternative Name: VAV3 ([VAV3 Products](#))

Background: Exchange factor for GTP-binding proteins RhoA, RhoG and, to a lesser extent, Rac1. Binds physically to the nucleotide-free states of those GTPases. Plays an important role in angiogenesis. Its recruitment by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly (By similarity). May be important for integrin-mediated signaling, at least in some cell types. In osteoclasts, along with SYK tyrosine kinase, required for signaling through integrin alpha-v/beta-1 (ITAGV-ITGB1), a crucial event for osteoclast proper cytoskeleton organization and function. This signaling pathway involves RAC1, but not RHO, activation. Necessary for proper wound healing. In the course of wound healing, required for the phagocytotic cup formation preceding macrophage phagocytosis of apoptotic neutrophils. Responsible for integrin beta-2 (ITGB2)-mediated macrophage adhesion and, to a lesser extent, contributes to beta-3 (ITGB3)-mediated adhesion. Does not affect integrin beta-1 (ITGB1)-mediated adhesion (By similarity). {ECO:0000250}.

Molecular Weight: 98.7 kDa Including tag.

UniProt: [Q9UKW4](#)

Pathways: [Fc-epsilon Receptor Signaling Pathway](#), [Neurotrophin Signaling Pathway](#)

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: 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