Datasheet for ABIN3092048

DAB2 Protein (AA 2-770) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	DAB2
Protein Characteristics:	AA 2-770
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DAB2 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	SNEVETSATN GQPDQQAAPK APSKKEKKKG PEKTDEYLLA RFKGDGVKYK AKLIGIDDVP DARGDKMSQD SMMKLKGMAA AGRSQGQHKQ RIWVNISLSG IKIIDEKTGV IEHEHPVNKI SFIARDVTDN RAFGYVCGGE GQHQFFAIKT GQQAEPLVVD LKDLFQVIYN VKKKEEEKKK IEEASKAVEN GSEALMILDD QTNKLKSGVD QMDLFGDMST PPDLNSPTES KDILLVDLNS EIDTNQNSLR ENPFLTNGIT SCSLPRPTPQ ASFLPENAFS ANLNFFPTPN PDPFRDDPFT QPDQSTPSSF DSLKSPDQKK ENSSSSSTPL SNGPLNGDVD YFGQQFDQIS NRTGKQEAQA GPWPFSSSQT QPAVRTQNGV SEREQNGFSV KSSPNPFVGS PPKGLSIQNG VKQDLESSVQ SSPHDSIAII PPPQSTKPGR GRRTAKSSAN DLLASDIFAP PVSEPSGQAS PTGQPTALQP NPLDLFKTSA PAPVGPLVGL GGVTVTLPQA GPWNTASLVF NQSPSMAPGA MMGGQPSGFS QPVIFGTSPA VSGWNQPSPF AASTPPPVPV VWGPSASVAP NAWSTTSPLG NPFQSNIFPA PAVSTQPPSM HSSLLVTPPQ PPPRAGPPKD ISSDAFTALD PLGDKEIKDV KEMFKDFQLR QPPAVPARKG EQTSSGTLSA FASYFNSKVG IPQENADHDD FDANQLLNKI NEPPKPAPRQ

Product Details

	VSLPVTKSTD NAFENPFFKD SFGSSQASVA SSQPVSSEMY RDPFGNPFA **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 DAB2 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:	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
Endotoxin Level:	Protein is endotoxin free.

Product Details

Grade:	Crystallography grade

Target Details

Target:	DAB2
Alternative Name:	DAB2 (DAB2 Products)
Background:	Adapter protein that functions as clathrin-associated sorting protein (CLASP) required for clathrin-mediated endocytosis of selected cargo proteins. Can bind and assemble clathrin, and binds simultaneously to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2) and cargos containg non-phosphorylated NPXY internalization motifs, such as the LDL receptor, to recruit them to clathrin-coated pits. Can function in clathrin-mediated endocytosis independently of the AP-2 complex. Involved in endocytosis of integrin beta-1, this function seems to redundant with the AP-2 complex and seems to require DAB2 binding to endocytosis accessory EH domain-containing proteins such as EPS15, EPS15L1 and ITSN1. Involved in endocytosis of cystic fibrosis transmembrane conductance regulator/CFTR. Involved in endocytosis of megalin/LRP2 lipoprotein receptor during embryonal development. Required for recycling of the TGF-beta receptor. Involved in CFTR trafficking to the late endosome. Involved in several receptor-mediated signaling pathways. Involved in TGF-beta receptor signaling and facilitates phosphorylation of the signal transducer SMAD2. Mediates TFG-beta-stimulated JNK activation. May inhibit the canoniocal Wnt/beta-catenin signaling pathway by stabilizing the beta-catenin destruction complex through a competing association with axin preventing its dephosphorylation through protein phosphatase 1 (PP1). Sequesters LRP6 towards clathrin-mediated endocytosis, leading to inhibition of Wnt/beta-catenin signaling. May activate non-canonical Wnt signaling. In cell surface growth factor/Ras signaling pathways proposed to inhibit ERK activation by interrupting the binding of GRB2 to SOS1 and to inhibit SRC by preventing its activating phosphorylation at 'Tyr-419'. Proposed to be involved in modulation of androgen receptor (AR) signaling mediated by SRC activation, seems to compete with AR for interaction with SRC. Plays a role in the CSF-1 signal transduction pathway. Plays a role in cellular differentiation. Involved in cell positioning and formation of visceral endoderm (VE) during embryogenesis and proposed to be required in the VE to respond to Nodal signaling coming from the epiblast. Required for the epithelial to mesenchymal transition, a process necessary for proper embryonic development. May be involved in myeloid cell differentiation and can induce macrophage adhesion and spreading. May act as a tumor suppressor. {ECO:0000269|PubMed:11387212, ECO:0000269|PubMed:12805222, ECO:0000269|PubMed:16267015, ECO:0000269|PubMed:16984970, ECO:0000269|PubMed:19306879, ECO:0000269|PubMed:21995445,

Target Details

	ECO:0000269|PubMed:22323290, ECO:0000269|PubMed:22491013}.
Molecular Weight:	83.3 kDa Including tag.
UniProt:	P98082
Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process

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.
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)

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