

Datasheet for ABIN3134871

EPS8 Protein (AA 1-821) (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	EPS8
Protein Characteristics:	AA 1-821
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPS8 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MNGHMSNRSS GYGVYPSQLN GYGSSPPYSQ MDREHSSRTS AKALYEQRKN YARDSVSSVS DVSQYRVEHL TTFVLDRKDA MITVEDGIRK LKLLDAKGKV WTQDMILQVD DRAVSLIDLE SKNELENFPL NTISHCQAVV HACSYDSILA LVCKEPTQSK PDLHLFQCDE VKANLISED ESAISDSKGG KQKRRPEALR MIAKADPGIP PPPRAPAPVP PGTVTQVDVR SRVAAWSAWA ADQGDFEKPR QYHEQEETPE MMAARIDRDV QILNHILDDI EFFITKLQKA AEAFSELSKR KKSCKSKRKG PGEGVLT LRA KPPPPDEFVD CFQKFKHGFN LLAKLKSHIQ NPSASDLVHF LFTPLNMVVQ ATGGPELASS VLSPLLTKDT VDFLNYTATA EERKLWMSLG DSWWKVRAEW PKEQFIPPYV PRFRNGWEPP MLNFMGAPTE QDMYQLAESV ANAEHQKQD SKRLSTEHSN VSDYPPADGY AYSSSMYHRG PHADHGEAAM PFKSTPNHQV DRNYDAVKTQ PKKYAKSKYD FVARNSSSELS VMKDDVLEIL DRRQWWKVR NASGDSGFVP NNILDIMRTP ESGVGRADPP YTHTIQKQRT EYGLRSADTP SAPSPPTPA PVPVPLPPSV PAPVSVPKVP ANVTRQNSSS SDSGGSIVRD SQRYKQLPVD RRKSQMEEVQ DELFQRLTIG RSAAQRKFHV PRQNVVINI
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TYDSSPEEVK TWLQSKGFNP VTVNSLGVLN GAQLFSLNKD ELRSVCPEGA RVFNQITVQK
AALEDNGSS ELQEIMRRRQ EKISAAASDS GVESFDEGSS H

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 Eps8 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

Endotoxin Level:

Protein is endotoxin free.

Product Details

Grade: Crystallography grade

Target Details

Target: EPS8

Alternative Name: Eps8 ([EPS8 Products](#))

Background: Signaling adapter that controls various cellular protrusions by regulating actin cytoskeleton dynamics and architecture. Depending on its association with other signal transducers, can regulate different processes. Together with SOS1 and ABI1, forms a trimeric complex that participates in transduction of signals from Ras to Rac by activating the Rac-specific guanine nucleotide exchange factor (GEF) activity. Acts as a direct regulator of actin dynamics by binding actin filaments and has both barbed-end actin filament capping and actin bundling activities depending on the context. Displays barbed-end actin capping activity when associated with ABI1, thereby regulating actin-based motility process: capping activity is auto-inhibited and inhibition is relieved upon ABI1 interaction. Also shows actin bundling activity when associated with BAIAP2, enhancing BAIAP2-dependent membrane extensions and promoting filopodial protrusions. Involved in the regulation of processes such as axonal filopodia growth, stereocilia length, dendritic cell migration and cancer cell migration and invasion. Acts as a regulator of axonal filopodia formation in neurons: in the absence of neurotrophic factors, negatively regulates axonal filopodia formation via actin-capping activity. In contrast, it is phosphorylated in the presence of BDNF leading to inhibition of its actin-capping activity and stimulation of filopodia formation. Component of a complex with DFNB31 and MYO15A that localizes at stereocilia tips and is required for elongation of the stereocilia actin core. Indirectly involved in cell cycle progression, its degradation following ubiquitination being required during G2 phase to promote cell shape changes.

{ECO:0000269|PubMed:10499589, ECO:0000269|PubMed:11524436, ECO:0000269|PubMed:15558031, ECO:0000269|PubMed:17115031, ECO:0000269|PubMed:19564905, ECO:0000269|PubMed:20532239, ECO:0000269|PubMed:21236676, ECO:0000269|PubMed:21835647, ECO:0000269|PubMed:8404850}.

Molecular Weight: 92.7 kDa Including tag.

UniProt: [Q08509](#)

Pathways: [EGFR Signaling Pathway](#), [Regulation of Actin Filament Polymerization](#)

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