

Datasheet for ABIN3135154

PHACTR4 Protein (AA 1-694) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	PHACTR4
Protein Characteristics:	AA 1-694
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHACTR4 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MEDPSEEAQ PSGDPGMGMD SVEAGDTTPP TKRKSFSAL GKIFKPWKWR KKKSSDKFKE TSEVLERKIS MRKPREELVK RGVLLDPEQ DGEDSGKLSH AALKNGHTTP IGSARSSSPV LVEEPPERSL RNLTPEEESK KRLGSTGSQP NSEAEPGPEH APKQPLLPPK RPLSSSCEAK EVPAGSTARS VSSTSGSTTV TSAATTAATD MTKTVKSFVG PTPAPAPAPR TLPAAPASAN TAATTTAPAK QPPIPPPKPA QRNSNPPIAE LSQAMNSGTV LSKPSPPLPP KRGIPSTSIP SLEPAASFTT KTANDQREKT VSLCLEPLI IPPSSPSPPL PTHIPPEPPR SPLVPAKTFQ IVPEVEFSSS SDFQDISQQ EDQKTEVPKK IQDQSFGESE IPSRLPPLPL HIRIQQALTS PLPVTTPLEG THRAHSLLE NSDSFSEDG TLGRTRSLPI TIEMLKVPDD EEEETCPFV EDVTSTSATP SLPLCLREEE KESDSDSEGP IKYRDEEEDD DDDSHQSAL ANRVKRKDTL AMKLSSRPSE PETNLNSWPR KSKEEWNEIR HQIGNTLIRR LSQRPTAEEL EQRNQLQPKN EADRQAEKRE IKRRLTRKLS QRPTVAELLA RKILRFNEYV EVTDAHDYDR RADKPWTKLT PADKAAIRKE LNEFKSSEME VHVDSKHFTY YHRP
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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 Phactr4 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.

Grade:

Crystallography grade

Target Details

Target:	PHACTR4
Alternative Name:	Phactr4 (PHACTR4 Products)
Background:	Regulator of protein phosphatase 1 (PP1) required for neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. Acts as an activator of PP1 by interacting with PPP1CA and preventing phosphorylation of PPP1CA at 'Thr-320'. During neural tube closure, localizes to the ventral neural tube and activates PP1, leading to down-regulate cell proliferation within cranial neural tissue and the neural retina. Also acts as a regulator of migration of enteric neural crest cells (ENCCs) by activating PP1, leading to dephosphorylation and subsequent activation of cofilin (COF1 or COF2) and repression of the integrin signaling through the RHO/ROCK pathway. {ECO:0000269 PubMed:17609112, ECO:0000269 PubMed:22215812}.
Molecular Weight:	77.6 kDa Including tag.
UniProt:	Q501J7
Pathways:	Tube Formation

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.

Handling

Expiry Date: Unlimited (if stored properly)

Images



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