Datasheet for ABIN3094036

PPP1R9B Protein (AA 1-815) (His tag)

Go to Product page

1 Image

Overview

Quantity:	1 mg
Target:	PPP1R9B
Protein Characteristics:	AA 1-815
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPP1R9B protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MMKTEPRGPG GPLRSASPHR SAYEAGIQAL KPPDAPGPDE APKGAHHKKY GSNVHRIKSM FLQMGTTAGP SGEAGGGAGL AEAPRASERG VRLSLPRASS LNENVDHSAL LKLGTSVSER VSRFDSKPAP SAQPAPPPHP PSRLQETRKL FERSAPAAGG DKEAARRLLR QERAGLQDRK LDVVVRFNGS TEALDKLDAD AVSPTVSQLS AVFEKADSRT GLHRGPGLPR AAGVPQVNSK LVSKRSRVFQ PPPPPPPAPS GDAPAEKERC PAGQQPPQHR VAPARPPPKP REVRKIKPVE VEESGESEAE SAPGEVIQAE VTVHAALENG STVATAASPA PEEPKAQAAP EKEAAAVAPP ERGVGNGRAP DVAPEEVDES KKEDFSEADL VDVSAYSGLG EDSAGSALEE DDEDDEEDGE PPYEPESGCV EIPGLSEEED PAPSRKIHFS TAPIQVFSTY SNEDYDRRNE DVDPMAASAE YELEKRVERL ELFPVELEKD SEGLGISIIG MGAGADMGLE KLGIFVKTVT EGGAAHRDGR IQVNDLLVEV DGTSLVGVTQ SFAASVLRNT KGRVRFMIGR ERPGEQSEVA QLIQQTLEQE RWQREMMEQR YAQYGEDDEE TGEYATDEDE ELSPTFPGGE MAIEVFELAE NEDALSPVDM EPEKLVHKFK ELQIKHAVTE AEIQQLKRKL QSLEQEKGRW RVEKAQLEQS VEENKERMEK

	LEGYWGEAQS LCQAVDEHLR ETQAQYQALE RKYSKAKRLI KDYQQKEIEF LKKETAQRRV LEESELARKE EMDKLLDKIS ELEGNLQTLR NSNST **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 PPP1R9B Protein (raised in E. Coli) 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 bacterial culture: 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:	PPP1R9B
Alternative Name:	PPP1R9B (PPP1R9B Products)
Background:	Seems to act as a scaffold protein in multiple signaling pathways. Modulates excitatory synaptic transmission and dendritic spine morphology. Binds to actin filaments (F-actin) and shows cross-linking activity. Binds along the sides of the F-actin. May play an important role in linking the actin cytoskeleton to the plasma membrane at the synaptic junction. Believed to target protein phosphatase 1/PP1 to dendritic spines, which are rich in F-actin, and regulates its specificity toward ion channels and other substrates, such as AMPA-type and NMDA-type glutamate receptors. Plays a role in regulation of G-protein coupled receptor signaling, including dopamine D2 receptors and alpha-adrenergic receptors. May establish a signaling complex for dopaminergic neurotransmission through D2 receptors by linking receptors downstream signaling molecules and the actin cytoskeleton. Binds to ADRA1B and RGS2 and mediates regulation of ADRA1B signaling. May confer to Rac signaling specificity by binding to both, RacGEFs and Rac effector proteins. Probably regulates p70 S6 kinase activity by forming a complex with TIAM1 (By similarity). Required for hepatocyte growth factor (HGF)-induced cell migration. {ECO:0000250, ECO:0000269|PubMed:19151759}.
Molecular Weight:	90.1 kDa Including tag.
UniProt:	Q96SB3
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling

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)

Images

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