

Datasheet for ABIN3135835

PPP1R9B Protein (AA 1-817) (Strep Tag)



Overview

Quantity:	250 μg
Target:	PPP1R9B
Protein Characteristics:	AA 1-817
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPP1R9B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MMKTEPRGPG GPLRSASPHR SAYEAGIQAL KPPDAPGPDE APKAAHHKKY GSNVHRIKSM
	FLQMGTTAGP PGEAGGGAGM AEAPRASDRG VRLSLPRASS LNENVDHSAL LKLGTSVSER
	VSRFDSKPAP SAQPAPPPHP PSRLQETRKL FERSVPAASG GDKEAVARRL LRQERAGLQD
	RKLDVVVRFN GSTEALDKLD ADAVSPTVSQ LSAVFEKADS RTGLHRAPGP PRAAGAPQVN
	SKLVTKRSRV FQPPPPPPAP SGDGATEKER GPGGQQPPQH RVAPARPPPK PREVRKIKPV
	EVEESGESEA ESAPGEVIQA EVTVHAALEN GSTPATTASP APEEPKAEAV PEEEAAASVA
	TLERGVDNGR APDMAPEEVD ESKKEDFSEA DLVDVSAYSG LGEDSGGSAL EEDDEEDEED
	GEPPYEPESG CVEIPGLSEE EDPAPSRKIH FSTAPIQVFS TYSNEDYDRR NEDVDPMAAS
	AEYELEKRVE RLELFPVELE KDSEGLGISI IGMGAGADMG LEKLGIFVKT VTEGGAAHRD
	GRIQVNDLLV EVDGTSLVGV TQSFAASVLR NTKGRVRFMI GRERPGEQSE VAQLIQQTLE
	QERWQREMME QRYAQYGEDD EETGEYATDE DEELSPTFPG GEMAIEVFEL AENEDALSPV

EMEPEKLVHK FKELQIKHAV TEAEIQQLKR KLQSLEQEKG RWRVEKAQLE QSVEENKERM EKLEGYWGEA QSLCQAVDEH LRETQAQYQA LERKYSKAKR LIKDYQQKEI EFLKKETAQR RVLEESELAR KEEMDKLLDK ISELEGNLQT LRNSNST

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany from design to production by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
 protein production are removed, leaving only the protein production machinery and the
 mitochondria to drive the reaction. During our lysate completion steps, the additional
 components needed for protein production (amino acids, cofactors, etc.) are added to
 produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- · The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression

Product Details

Product Details	
	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	PPP1R9B
Alternative Name:	Ppp1r9b (PPP1R9B Products)
Background:	Neurabin-2 (Neurabin-II) (Protein phosphatase 1 regulatory subunit 9B)
	(Spinophilin),FUNCTION: 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 ADRA1E
	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. Required for hepatocyte growth factor (HGF)-
	induced cell migration (By similarity). {ECO:0000250}.
Molecular Weight:	89.5 kDa
UniProt:	Q6R891
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
	guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from
	Nicotiana tabacum c.v This contains all the protein expression machinery needed to produce

Application Details

even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months