Datasheet for ABIN3131869

Periaxin Protein (PRX) (AA 1-1391) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	Periaxin (PRX)
Protein Characteristics:	AA 1-1391
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Periaxin protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MEARSRSAEE LRRAELVEII VETEAQTGVS GFNVAGGGKE GIFVRELRED SPAAKSLSLQ EGDQLLSARV FFENFKYEDA LRLLQCAEPY KVSFCLKRTV PTGDLALRPG TVSGYEMKGP RAKVAKLNIQ SLAPVKKKKM VTGALGTPAD LAPVDVEFSF PKFSRLRRGL KAEAVKGPVP AAPARRRLQL PRLRVREVAE EAQVARMAAA APPPRKAKAE AEAATGAGFT APQIELVGPR LPSAEVGVPQ VSVPKGTPST EAASGFALHL PTLGLGAPAA PAVEPPATGI QVPQVELPTL PSLPTLPTLP CLDTQEGAAV VKVPTLDVAA PSMGVDLALP GAEVEAQGEV PEVALKMPRL SFPRFGIRGK EATEAKVVKG SPEAKAKGPR LRMPTFGLSL LEPRPSGPEA VAESKLKLPT LKMPSFGIGV AGPEVKAPTG PEVKLPKVPE VKLPKVPEAA IPDVQLPEVQ LPKMSDMKLP KIPEMVVPDV RLPEVQLPKV PEMKVPEMKL PKWPEMAVPD VHLPDVQLPK VPEMKLPKVP EMAVPDVHLP DVQLPKVPEM KLPEMKLPKV PEMAVPDVRL PEVQLPKVSE VKLPKMPEMA VPDVHLPELQ LPKMSEVKLP KMPEMAVPDV RLPEVQLPKV SEMKLPKMPE MTMPDIRLPE

VQLPKVPDIK LPEMKLPEIK LPKVPDMAVP DVPLPELQLP KVSDIRLPEM QVSQVPEVQL PKMPEMKLSK VPEVQRKSAG AEQAKGTEFS FKLPKMTMPK LGKVGKPGEA SIEVPDKLMT LPCLQPEVGT EASHVGVPSL SLPSVELDLP GALGLEGQVQ EAVPGKVEKP EGPRVAVGVG EVGFRVPSVE IVTPQLPTVE VEKEQLEMVE MKVKPSSKFS LPKFGLSGPK AVKGEVEGPG RATKLKVSKF TISLPKARAG TEAEAKGAGE AGLLPALDLS IPQLSLDAQL PSGKVEVADS KPKSSRFALP KFGVKGRDSE ADVLVAGEAE LEGKGWGWDG KVKMPKLKMP SFGLSRGKEA ETQDGRVSPG EKLEAIAGQL KIPAVELVTP GAQETEKVTS GVKPSGLQVS TTGQVVAEGQ ESVQRVSTLG ISLPQVELAS FGEAGPEIVA PSAEGTAGSR VQVPQVMLEL PGTQVAGGDL LVGEGIFKMP TVTVPQLELD VGLGHEAQAG EAAKSEGGIK LKLPTLGTGS RGEGVEPQGP EAQRTFHLSL PDVELTSPVS SHAEYQVVEG DGDGGHKLKV RLPLFGLAKA KEGIEVGEKV KSPKLRLPRV GFSQSESVSG EGSPSPEEEE EGSGEGASSR RGRVRVRLPR VGLASPSKVS KGQEGDATSK SPVGEKSPKF RFPRVSLSPK ARSGSRDREE GGFRVRLPSV GFSETAVPGS TRIEGTQAAA I

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 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

Product Details

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 System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	Periaxin (PRX)
Alternative Name:	Prx (PRX Products)
Background:	Periaxin,FUNCTION: Scaffolding protein that functions as part of a dystroglycan complex in Schwann cells, and as part of EZR and AHNAK-containing complexes in eye lens fiber cells (PubMed:11430802, PubMed:21745462, PubMed:22764250). Required for the maintenance of the peripheral myelin sheath that is essential for normal transmission of nerve impulses and normal perception of sensory stimuli (PubMed:10839370). Required for normal transport of MBP mRNA from the perinuclear to the paranodal regions (PubMed:15356632). Required for normal remyelination after nerve injury (PubMed:10839370). Required for normal elongation of Schwann cells and normal length of the internodes between the nodes of Ranvier. The demyelinated nodes of Ranvier permit saltatory transmission of nerve impulses, shorter internodes cause slower transmission of nerve impulses (PubMed:15356632, PubMed:23022068). Required for the formation of appositions between the abaxonal surface of the myelin sheath and the Schwann cell plasma membrane, the Schwann cell cytoplasm is restricted to regions between these appositions (PubMed:15356632, PubMed:23022068). Required for the formation of Cajal bands and of Schmidt-Lanterman incisures that correspond to short, cytoplasm-filled regions on myelinated nerves (PubMed:23022068, PubMed:22764250). Recruits DRP2 to the Schwann cell plasma membrane

Target Details

	(PubMed:11430802, PubMed:23022068, PubMed:22764250). Required for normal protein composition of the eye lens fiber cell plasma membrane and normal eye lens fiber cell morphology (PubMed:21745462). {ECO:0000269|PubMed:10839370, ECO:0000269|PubMed:11430802, ECO:0000269|PubMed:15356632, ECO:0000269|PubMed:22764250, ECO:0000269|PubMed:23022068}.
Molecular Weight:	147.7 kDa
UniProt:	O55103

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 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