Datasheet for ABIN3094458

PARP9 Protein (AA 1-854) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PARP9
Protein Characteristics:	AA 1-854
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARP9 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MDFSMVAGAA AYNEKSGRIT SLSLLFQKVF AQIFPQWRKG NTEECLPYKC SETGALGENY SWQIPINHND FKILKNNERQ LCEVLQNKFG CISTLVSPVQ EGNSKSLQVF RKMLTPRIEL SVWKDDLTTH AVDAVVNAAN EDLLHGGGLA LALVKAGGFE IQEESKQFVA RYGKVSAGEI AVTGAGRLPC KQIIHAVGPR WMEWDKQGCT GKLQRAIVSI LNYVIYKNTH IKTVAIPALS SGIFQFPLNL CTKTIVETIR VSLQGKPMMS NLKEIHLVSN EDPTVAAFKA ASEFILGKSE LGQETTPSFN AMVVNNLTLQ IVQGHIEWQT ADVIVNSVNP HDITVGPVAK SILQQAGVEM KSEFLATKAK QFQRSQLVLV TKGFNLFCKY IYHVLWHSEF PKPQILKHAM KECLEKCIEQ NITSISFPAL GTGNMEIKKE TAAEILFDEV LTFAKDHVKH QLTVKFVIFP TDLEIYKAFS SEMAKRSKML SLNNYSVPQS TREEKRENGL EARSPAINLM GFNVEEMYEA HAWIQRILSL QNHHIIENNH ILYLGRKEHD ILSQLQKTSS VSITEIISPG RTELEIEGAR ADLIEVVMNI EDMLCKVQEE MARKKERGLW RSLGQWTIQQ QKTQDEMKEN IIFLKCPVPP TQELLDQKKQ

FEKCGLQVLK VEKIDNEVLM AAFQRKKKMM EEKLHRQPVS HRLFQQVPYQ FCNVVCRVGF QRMYSTPCDP KYGAGIYFTK NLKNLAEKAK KISAADKLIY VFEAEVLTGF FCQGHPLNIV PPPLSPGAID GHDSVVDNVS SPETFVIFSG MQAIPQYLWT CTQEYVQSQD YSSGPMRPFA QHPWRGFASG SPVD

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 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.

Product Details

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:	PARP9
Alternative Name:	PARP9 (PARP9 Products)
Background:	Protein mono-ADP-ribosyltransferase PARP9 (EC 2.4.2.-) (ADP-ribosyltransferase diphtheria toxin-like 9) (ARTD9) (B aggressive lymphoma protein) (Poly [ADP-ribose] polymerase 9) (PARP-9),FUNCTION: ADP-ribosyltransferase which, in association with E3 ligase DTX3L, plays a role in DNA damage repair and in immune responses including interferon-mediated antiviral defenses (PubMed:16809771, PubMed:23230272, PubMed:26479788, PubMed:27796300). Within the complex, enhances DTX3L E3 ligase activity which is further enhanced by PARP9 binding to poly(ADP-ribose) (PubMed:28525742). In association with DTX3L and in presence of E1 and E2 enzymes, mediates NAD(+)-dependent mono-ADP-ribosylation of ubiquitin which prevents ubiquitin conjugation to substrates such as histones (PubMed:28525742). During DNA repair, PARP1 recruits PARP9/BAL1-DTX3L complex to DNA damage sites via PARP9 binding to ribosylated PARP1 (PubMed:23230272). Subsequent PARP1-dependent PARP9/BAL1-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites (PubMed:23230272, PubMed:28525742). In response to DNA damage, PARP9-DTX3L complex is required for efficient non-homologous end joining (NHEJ), the complex function is negatively modulated by PARP9 activity (PubMed:28525742). Dispensable for B-cell receptor (BCR) assembly through V(D)J recombination and class switch recombination (CSR) (By similarity). In macrophages, positively regulates pro-inflammatory cytokines production in response to IFNG stimulation by suppressing PARP14-mediated STAT1 ADP-ribosylation and thus promoting STAT1 phosphorylation (PubMed:27796300). Also suppresses PARP14-mediated STAT6 ADP-ribosylation (PubMed:27796300). {ECO:0000250|UniProtKB:Q8CAS9, ECO:0000269|PubMed:16809771, ECO:0000269|PubMed:23230272, ECO:0000269|PubMed:26479788, ECO:0000269|PubMed:27796300, ECO:0000269|PubMed:28525742}.
Molecular Weight:	96.3 kDa

Target Details

UniProt:	Q8IXQ6

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

