

Datasheet for ABIN3132167

PARG Protein (PARG) (AA 1-969) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PARG
Protein Characteristics:	AA 1-969
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARG protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MSAGPGWEPC TKRPRWGAAG TSAPTASDSR SFPGRQRRVL DPKDAPVQFR VPPSSPACVS GRAGPHRGNA TSFVKQKTI TTWMDTKGPK TAESESKENN NTRIDSMMS VQKDNFYPHK VEKLENVPQL NLDKSPTEKS SQYLNQQQTA SVCKWQNEGK HAEQLLASEP PAGTPLPKQL SNANIGQSPH TDDHSDTDHE EDRDNQQFLT PIKLANTKPT VGDGQARSNC KCSGSRQSVK DCTGCQQEEV DVLPEsplSD VGAEDIGTGP KNDNKLTGQE SSLGDSPPE KESEPEsPMD VDNSKNSCQD SEADEETSPV FDEQDDRssQ TANKLSSCQA READGDLRKR YLTkgSEVRL HFQFEGENNA GTSDLNAKPS GNSSSLNVEC RSSKQHGKRD SKITDHFMRI SKSEDRRKEQ CEVRHQrTER KIPKYIPPNL PPEKKWLGTP IEEMRMKPRC GIHLPSLRPS ASHTVTVRVD LLRAGEVPKP FPTHYKDLWD NKHVkMPCSE QNLYPVEDEN GERTAGSRWE LIQTALLNKF TRPQNLKDAI LKYNVAYSKK WDFTALVDFW DKVLEEAEaQ HLYQSILPDM VKIALCLPNI CTQPIPLLKQ KMNHsVTMSQ EQIASLLANA FFCTFPRRNA KMKSEYSSYP DINFNRLFEG

RSSRKPEKLLK TLFCYFRRVT EKKPTGLVTF TRQSLEDFPE WERCEKPLTR LHVTYEGTIE
GNRGMLQVD FANRFVGGGV TGAGLVQEEI RFLINPELIV SRLFTEVLHD NECLITGTE
QYSEYTGAE TYRWARSHED GSEKDDWQRR CTEIVAIDAL HFRRYLDQFV PEKVRRELNK
AYCGFLRPGV PSENLSAVAT GNWGCAGFGG DARLKALIQI LAAAAAERDV VYFTFGDSEL
MRDIYSMHTF LTERKLDVGK VYKLLRLYYN EECRNCSTPG PDIKLYPFIY HAVESSAETT
DMPGQKAGT

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.

Product Details

- 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: PARG

Alternative Name: Parg ([PARG Products](#))

Background: Poly(ADP-ribose) glycohydrolase (EC 3.2.1.143),FUNCTION: Poly(ADP-ribose) glycohydrolase that degrades poly(ADP-ribose) by hydrolyzing the ribose-ribose bonds present in poly(ADP-ribose). PARG acts both as an endo- and exoglycosidase, releasing poly(ADP-ribose) of different length as well as ADP-ribose monomers. It is however unable to cleave the ester bond between the terminal ADP-ribose and ADP-ribosylated residues, leaving proteins that are mono-ADP-ribosylated. Poly(ADP-ribose) is synthesized after DNA damage is only present transiently and is rapidly degraded by PARG. Required to prevent detrimental accumulation of poly(ADP-ribose) upon prolonged replicative stress, while it is not required for recovery from transient replicative stress. Responsible for the prevalence of mono-ADP-ribosylated proteins in cells, thanks to its ability to degrade poly(ADP-ribose) without cleaving the terminal protein-ribose bond. Required for retinoid acid-dependent gene transactivation, probably by removing poly(ADP-ribose) from histone demethylase KDM4D, allowing chromatin derepression at RAR-dependent gene promoters. Involved in the synthesis of ATP in the nucleus, together with PARP1, NMNAT1 and NUDT5. Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming. {ECO:0000250|UniProtKB:Q86W56}.

Molecular Weight: 109.3 kDa

UniProt: [O88622](#)

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.

Application Details

Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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!
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Restrictions:	For Research Use only
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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