Datasheet for ABIN7554892

PARG Protein (PARG) (AA 1-976) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	PARG
Protein Characteristics:	AA 1-976
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARG protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat PARG Protein expressed in mammalien cells.
Sequence:	MNAGPGCEPC TKRPRWGAAT TSPAASDARS FPSRQRRVLD PKDAHVQFRV PPSSPACVPG RAGQHRGSAT SLVFKQKTIT SWMDTKGIKT AESESLDSKE NNNTRIESMM SSVQKDNFYQ HNVEKLENVS QLSLDKSPTE KSTQYLNQHQ TAAMCKWQNE GKHTEQLLES EPQTVTLVPE QFSNANIDRS PQNDDHSDTD SEENRDNQQF LTTVKLANAK QTTEDEQARE AKSHQKCSKS CDPGEDCASC QQDEIDVVPE SPLSDVGSED VGTGPKNDNK LTRQESCLGN SPPFEKESEP ESPMDVDNSK NSCQDSEADE ETSPGFDEQE DGSSSQTANK PSRFQARDAD IEFRKRYSTK GGEVRLHFQF EGGESRTGMN DLNAKLPGNI SSLNVECRNS KQHGKKDSKI TDHFMRLPKA EDRRKEQWET KHQRTERKIP KYVPPHLSPD KKWLGTPIEE MRRMPRCGIR LPLLRPSANH TVTIRVDLLR AGEVPKPFPT HYKDLWDNKH VKMPCSEQNL YPVEDENGER TAGSRWELIQ TALLNKFTRP QNLKDAILKY NVAYSKKWDF TALIDFWDKV LEEAEAQHLY QSILPDMVKI ALCLPNICTQ PIPLLKQKMN HSITMSQEQI ASLLANAFFC TFPRRNAKMK SEYSSYPDIN

Product Details

	FNRLFEGRSS RKPEKLKTLF CYFRRVTEKK PTGLVTFTRQ SLEDFPEWER CEKPLTRLHV TYEGTIEENG QGMLQVDFAN RFVGGGVTSA GLVQEEIRFL INPELIISRL FTEVLDHNEC LIITGTEQYS EYTGYAETYR WSRSHEDGSE RDDWQRRCTE IVAIDALHFR RYLDQFVPEK MRRELNKAYC GFLRPGVSSE NLSAVATGNW GCGAFGGDAR LKALIQILAA AAAERDVVYF TFGDSELMRD IYSMHIFLTE RKLTVGDVYK LLLRYYNEEC RNCSTPGPDI KLYPFIYHAV ESCAETADHS GQRTGT **Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
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) (PubMed:15450800, PubMed:21892188, PubMed:23102699, PubMed:23474714, PubMed:33186521, PubMed:34321462, PubMed:34019811). PARG acts both as an endo- and exoglycosidase, releasing poly(ADP-ribose) of different length as well as ADP-ribose monomers

Target Details

	(PubMed:23102699, PubMed:23481255). 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 (PubMed:21892188, PubMed:23474714, PubMed:33186521). Poly(ADP-ribose) is synthesized after DNA damage is only present transiently and is rapidly degraded by PARG (PubMed:23102699, PubMed:34019811). Required to prevent detrimental accumulation of poly(ADP-ribose) upon prolonged replicative stress, while it is not required for recovery from transient replicative stress (PubMed:24906880). 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 (PubMed:33186521). 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 (PubMed:23102699). Involved in the synthesis of ATP in the nucleus, together with PARP1, NMNAT1 and NUDT5 (PubMed:27257257). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:27257257). {ECO:0000269|PubMed:15450800, ECO:0000269|PubMed:21892188, ECO:0000269|PubMed:23102699, ECO:0000269|PubMed:23474714, ECO:0000269|PubMed:23481255, ECO:0000269|PubMed:24906880, ECO:0000269|PubMed:27257257, ECO:0000269|PubMed:33186521, ECO:0000269|PubMed:34019811, ECO:0000269|PubMed:34321462}.
Molecular Weight:	111.1 kDa
UniProt:	Q86W56

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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months