Datasheet for ABIN7554875

PARP3 Protein (AA 1-533) (His tag)

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Overview

Quantity:	1 mg
Target:	PARP3
Protein Characteristics:	AA 1-533
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARP3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat PARP3 Protein expressed in mammalien cells.
Sequence:	MAPKPKPWVQ TEGPEKKKGR QAGREEDPFR STAEALKAIP AEKRIIRVDP TCPLSSNPGT QVYEDYNCTL NQTNIENNNN KFYIIQLLQD SNRFFTCWNR WGRVGEVGQS KINHFTRLED AKKDFEKKFR EKTKNNWAER DHFVSHPGKY TLIEVQAEDE AQEAVVKVDR GPVRTVTKRV QPCSLDPATQ KLITNIFSKE MFKNTMALMD LDVKKMPLGK LSKQQIARGF EALEALEEAL KGPTDGGQSL EELSSHFYTV IPHNFGHSQP PPINSPELLQ AKKDMLLVLA DIELAQALQA VSEQEKTVEE VPHPLDRDYQ LLKCQLQLLD SGAPEYKVIQ TYLEQTGSNH RCPTLQHIWK VNQEGEEDRF QAHSKLGNRK LLWHGTNMAV VAAILTSGLR IMPHSGGRVG KGIYFASENS KSAGYVIGMK CGAHHVGYMF LGEVALGREH HINTDNPSLK SPPPGFDSVI ARGHTEPDPT QDTELELDGQ QVVVPQGQPV PCPEFSSSTF SQSEYLIYQE SQCRLRYLLE VHL **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**

Product Details

	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:	PARP3
Alternative Name:	PARP3 (PARP3 Products)
Background:	Protein mono-ADP-ribosyltransferase PARP3 (EC 2.4.2.-) (ADP-ribosyltransferase diphtheria toxin-like 3) (ARTD3) (DNA ADP-ribosyltransferase PARP3) (EC 2.4.2.-) (IRT1) (NAD(+) ADP-ribosyltransferase 3) (ADPRT-3) (Poly [ADP-ribose] polymerase 3) (PARP-3) (hPARP-3) (Poly[ADP-ribose] synthase 3) (pADPRT-3),FUNCTION: Mono-ADP-ribosyltransferase that mediates mono-ADP-ribosylation of target proteins and plays a key role in the response to DNA damage (PubMed:16924674, PubMed:20064938, PubMed:21211721, PubMed:21270334, PubMed:25043379, PubMed:24598253, PubMed:28447610, PubMed:19354255, PubMed:23742272). Mediates mono-ADP-ribosylation of glutamate, aspartate or lysine residues on target proteins (PubMed:20064938, PubMed:25043379). In contrast to PARP1 and PARP2, it is not able to mediate poly-ADP-ribosylation (PubMed:25043379). Involved in DNA repair by mediating mono-ADP-ribosylation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism, such as histone H2B, XRCC5 and XRCC6

Target Details

	(PubMed:16924674, PubMed:24598253). ADP-ribosylation follows DNA damage and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks (PubMed:16924674, PubMed:21211721, PubMed:21270334). Involved in single-strand break repair by catalyzing mono-ADP-ribosylation of histone H2B on 'Glu-2' (H2BE2ADPr) of nucleosomes containing nicked DNA (PubMed:27530147). Cooperates with the XRCC5-XRCC6 (Ku80-Ku70) heterodimer to limit end-resection thereby promoting accurate NHEJ (PubMed:24598253). Suppresses G-quadruplex (G4) structures in response to DNA damage (PubMed:28447610). Associates with a number of DNA repair factors and is involved in the response to exogenous and endogenous DNA strand breaks (PubMed:16924674, PubMed:21211721, PubMed:21270334). Together with APLF, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ) (PubMed:21211721). May link the DNA damage surveillance network to the mitotic fidelity checkpoint (PubMed:16924674). Acts as a negative regulator of immunoglobulin class switch recombination, probably by controlling the level of AICDA /AID on the chromatin (By similarity). In addition to proteins, also able to ADP-ribosylate DNA: mediates DNA mono-ADP-ribosylation of DNA strand break termini via covalent addition of a single ADP-ribose moiety to a 5'- or 3'-terminal phosphate residues in DNA containing multiple strand breaks (PubMed:29361132, PubMed:29520010). {ECO:0000250|UniProtKB:Q3ULW8, ECO:0000269|PubMed:16924674, ECO:0000269|PubMed:19354255, ECO:0000269|PubMed:20064938, ECO:0000269|PubMed:21211721, ECO:0000269|PubMed:21270334, ECO:0000269|PubMed:23742272, ECO:0000269|PubMed:24598253, ECO:0000269|PubMed:25043379, ECO:0000269|PubMed:27530147, ECO:0000269|PubMed:28447610, ECO:0000269|PubMed:29361132, ECO:0000269|PubMed:29520010}.
Molecular Weight:	60.1 kDa
UniProt:	Q9Y6F1

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