

Datasheet for ABIN7554902 PARP9 Protein (AA 1-854) (His tag)



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Overview

Quantity:	1 mg
Target:	PARP9
Protein Characteristics:	AA 1-854
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARP9 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PARP9 Protein expressed in mammalian cells.		
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 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.		
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different		
	isoform, please contact us regarding an individual offer.		
Characteristics:	Key Benefits:		
	 Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian 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 protain is a made to order protein and will be made for the first time for your order. Our		
	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, anti-tag ELISA, 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 i		
	DNA damage repair and in immune responses including interferon-mediated antiviral defenses		
	(PubMed:16809771, PubMed:23230272, PubMed:26479788, PubMed:27796300). Within the		
	complex enhances NTY31 F3 ligase activity which is further enhanced by PAPPO hinding to		

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-DTX3Lmediated 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 ADPribosylation (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

UniProt: Q8IXQ6

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format:

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.

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Expiry Date:

12 months