Datasheet for ABIN7562627

PARP2 Protein (AA 1-559) (His tag)

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Overview

Quantity:	1 mg
Target:	PARP2
Protein Characteristics:	AA 1-559
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PARP2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Parp2 Protein expressed in mammalien cells.
Sequence:	MAPRRQRSGS GRRVLNEAKK VDNGNKATED DSPPGKKMRT CQRKGPMAGG KDADRTKDNR DSVKTLLLKG KAPVDPECAA KLGKAHVYCE GDDVYDVMLN QTNLQFNNNK YYLIQLLEDD AQRNFSVWMR WGRVGKTGQH SLVTCSGDLN KAKEIFQKKF LDKTKNNWED RENFEKVPGK YDMLQMDYAA STQDESKTKE EETLKPESQL DLRVQELLKL ICNVQTMEEM MIEMKYDTKR APLGKLTVAQ IKAGYQSLKK IEDCIRAGQH GRALVEACNE FYTRIPHDFG LSIPPVIRTE KELSDKVKLL EALGDIEIAL KLVKSERQGL EHPLDQHYRN LHCALRPLDH ESNEFKVISQ YLQSTHAPTH KDYTMTLLDV FEVEKEGEKE AFREDLPNRM LLWHGSRLSN WVGILSHGLR VAPPEAPITG YMFGKGIYFA DMSSKSANYC FASRLKNTGL LLLSEVALGQ CNELLEANPK AQGLLRGKHS TKGMGKMAPS PAHFITLNGS TVPLGPASDT GILNPEGYTL NYNEFIVYSP NQVRMRYLLK IQFNFLQLW **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make**

Product Details

	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:	PARP2
Alternative Name:	Parp2 (PARP2 Products)
Background:	Poly [ADP-ribose] polymerase 2 (PARP-2) (mPARP-2) (EC 2.4.2.30) (ADP-ribosyltransferase diphtheria toxin-like 2) (ARTD2) (DNA ADP-ribosyltransferase PARP2) (EC 2.4.2.-) (NAD(+) ADP-ribosyltransferase 2) (ADPRT-2) (Poly[ADP-ribose] synthase 2) (pADPRT-2) (Protein poly-ADP-ribosyltransferase PARP2) (EC 2.4.2.-),FUNCTION: Poly-ADP-ribosyltransferase that mediates poly-ADP-ribosylation of proteins and plays a key role in DNA repair (PubMed:10364231, PubMed:12065591). Mediates glutamate, aspartate or serine ADP-ribosylation of proteins: the ADP-D-ribosyl group of NAD(+) is transferred to the acceptor carboxyl group of target residues and further ADP-ribosyl groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units (PubMed:12065591). Serine ADP-ribosylation of proteins constitutes the primary form of ADP-ribosylation of proteins in response to DNA damage (By similarity). Mediates glutamate and aspartate ADP-ribosylation of target proteins in absence of HPF1 (By similarity). Following interaction with HPF1, catalyzes

Target Details

	serine ADP-ribosylation of target proteins, HPF1 conferring serine specificity by completing the PARP2 active site (By similarity). PARP2 initiates the repair of double-strand DNA breaks: recognizes and binds DNA breaks within chromatin and recruits HPF1, licensing serine ADP-ribosylation of target proteins, such as histones, thereby promoting decompaction of chromatin and the recruitment of repair factors leading to the reparation of DNA strand breaks (By similarity). HPF1 initiates serine ADP-ribosylation but restricts the polymerase activity of PARP2 in order to limit the length of poly-ADP-ribose chains (By similarity). Specifically mediates formation of branched poly-ADP-ribosylation (By similarity). Branched poly-ADP-ribose chains are specifically recognized by some factors, such as APLF (By similarity). In addition to proteins, also able to ADP-ribosylate DNA: preferentially acts on 5'-terminal phosphates at DNA strand breaks termini in nicked duplex (By similarity). {ECO:0000250|UniProtKB:Q9UGN5, ECO:0000269|PubMed:10364231, ECO:0000269|PubMed:12065591}.
Molecular Weight:	63.4 kDa
UniProt:	O88554
Pathways:	DNA Damage Repair

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