abcam

Product datasheet

Recombinant human PARP1 protein ab157046

1 Image

Description	
Product name	Recombinant human PARP1 protein
Purity	>= 99 % SDS-PAGE.
	ab157046 was affinity purified
Expression system	Baculovirus infected Sf9 cells
Accession	<u>P09874</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MAESSDKLYRVEYAKSGRASCKKCSESIPKDSLRMAIMV QSPMFDGKVPH WYHFSCFWKVGHSIRHPDVEVDGFSELRWDDQQKVKKT AEAGGVTGKGQD
	GIGSKAEKTLGDFAAEYAKSNRSTCKGCMEKIEKGQVRLS KKMVDPEKPQ
	LGMIDRWYHPGCFVKNREELGFRPEYSASQLKGFSLLAT EDKEALKKQLP
	GVKSEGKRKGDEVDGVDEVAKKKSKKEKDKDSKLEKAL KAQNDLIWNIKD
	ELKKVCSTNDLKELLIFNKQQVPSGESAILDRVADGMVFG
	QLVFKSDAYYCTGDVTAWTKCMVKTQTPNRKEWVTPKE FREISYLKKLKV
	KKQDRIFPPETSASVAATPPPSTASAPAAVNSSASADKP LSNMKILTLGK
	LSRNKDEVKAMIEKLGGKLTGTANKASLCISTKKEVEKMN KKMEEVKEAN
	IRVVSEDFLQDVSASTKSLQELFLAHILSPWGAEVKAEPV EVVAPRGKSG
	AALSKKSKGQVKEEGINKSEKRMKLTLKGGAAVDPDSGL EHSAHVLEKGG
	KVFSATLGLVDIVKGTNSYYKLQLLEDDKENRYWIFRSWG RVGTVIGSNK
	LEQMPSKEDAIEHFMKLYEEKTGNAWHSKNFTKYPKKFY
	1

		PLEIDYGQDEE AVKKLTVNPGTKSKLPKPVQDLIKMIFDVESMKKAMVEYEI DLQKMPLGK LSKRQIQAAYSILSEVQQAVSQGSSDSQILDLSNRFYTLIPH DFGMKKPP LLNNADSVQAKVEMLDNLLDIEVAYSLLRGGSDDSSKDPI DVNYEKLKTD IKVVDRDSEEAEIIRKYVKNTHATTHNAYDLEVIDIFKIEREG ECQRYKP FKQLHNRRLLWHGSRTTNFAGILSQGLRIAPPEAPVTGYM FGKGIYFADM VSKSANYCHTSQGDPIGLILLGEVALGNMYELKHASHISKL PKGKHSVKG LGKTTPDPSANISLDGVDVPLGTGISSGVNDTSLLYNEYIVY DIAQVNLK YLLKLKFNFKTSLW
Predicted molecular weight	113 kDa	
Amino acids	1 to 1041	

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab157046 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

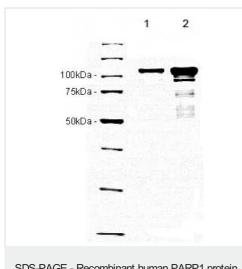
Applications	Functional Studies
	SDS-PAGE
Form	Liquid
Additional notes	600U/mg protein. One unit is defined as the amount of enzyme that synthesizes 1nmol of poly(ADP-ribose) per min. at 25°C, pH 7.5.
Preparation and Storage	
Stability and Storage	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
	Constituents: 0.01% PMSF, 0.11% 2-Mercaptoethanol, 1.58% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.02% Ethylenediaminetetraacetic acid, disodium, dihydrate
	This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2/TIP150.
Sequence similarities	Contains 1 BRCT domain. Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain.

	Contains 2 PARP-type zinc fingers.
Post-translational	Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR.
modifications	Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to DNA damage sites.
	S-nitrosylated, leading to inhibit transcription regulation activity.
Cellular localization	Nucleus.

Images



10% SDS-Polyacrylamide analysis of ab157046 at 1µg (lane 1) and 4µg (lane 2)

SDS-PAGE - Recombinant human PARP1 protein (ab157046)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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