

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	P09874
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Sequence

MAESSDKLYRVEYAKSGRASCKKCSSESIPKDSLRMAMV
 QSPMFDGKVP
 WYHFSCFWKVGHSIRHPDVEVDGFSELRWDDQQKVKKT
 AEAGGVTGKGQD
 GIGSKAETLGDFAAEYAKSNRSTCKGCMEKIEKGQVRLS
 KKMVDPEKPQ
 LGMIDRWYHPGCFVKNREELGFRPEYSASQLKGFSLLAT
 EDKEALKKQLP
 GVKSEGKRKGDVEVDGVDEVAKKKSKKEKDKDSKLEKAL
 KAQNDLIWNKID
 ELKKVCSTNDLKELLIFNKQQVPSGESAILDRVADGMVFG
 ALLPCEECESG
 QLVFKSDAYYCTGDVTAWTKCMVKTQTPNRKEWVTPKE
 FREISYLKCLKV
 KKQDRIFPPETSASVAATPPPSTASAPAAVNSSASADKP
 LSNMKILTLGK
 LSRNKDEVKAMIEKLGKLTGTANKASLCISTKKEVEKMN
 KKMEEVKEAN
 IRVVSDFLQDVSASTKSLQELFLAHILSPWGAEVKAEPV
 EVVAPRGKSG
 AALSCKSKGQVKEEGINKSEKRMKLTGKGAAVDPDSSL
 ESHAHVLEKGG
 KVFSATLGLVDIVKGTNSYKQLLLEDDKENRYWIFRSWG
 RVGTVIGSNK
 LEQMPSKEDAIEHFMKLYEEKTGNAWHNSKNFTKYPKKFY

PLEIDYGQDEE
AVKCLTVNPGTKSKLPKPVQDLIKMIFDVESMKKAMVEYEI
DLQKMPLGK
LSKRQIAAAYSILSEVQQAVSQGSSDSQILDLSNRFYTLIPH
DFGMKKPP
LLNADSVQAKVEMLDNLLDIEVAYSLLRGGSDSSKDPI
DVNYEKLKTD
IKVVDRDSEEAELIRKYVKNTHATTHNAYDLEVIDIFKIEREG
ECQRYKP
FKQLHNRLLWHGSRRTNFAGILSQGLRIAPPEAPVTGYM
FGKGYFADM
VSKSANYCHTSQGDPIGLILLGEVALGNMYELKHASHISKL
PKGKHSVKG
LGKTPDPSANISLDGVDVPLGTGISSGVNDTSLLYNEYVY
DIAQVNLK YLLKLFNFKTSW

Predicted molecular weight 113 kDa
Amino acids 1 to 1041

Specifications

Our [Abpromise guarantee](#) 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.

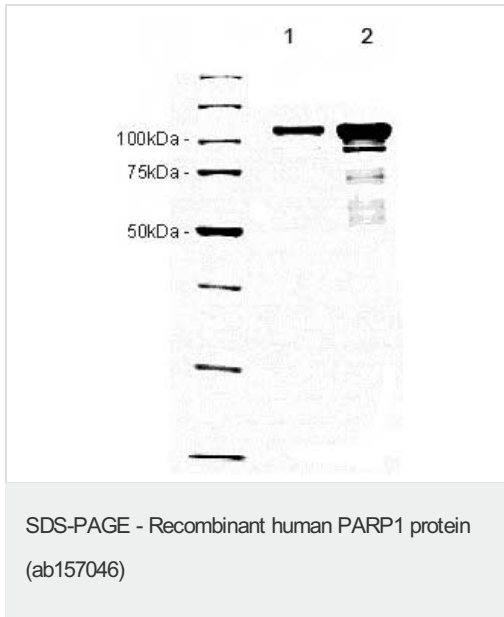
Post-translational modifications

Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR. 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 1 μ g (lane 1) and 4 μ g (lane 2)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors