**Product datasheet**

**Anti-PARP1 antibody ab194586**

**Overview**
- **Product name**: Anti-PARP1 antibody
- **Description**: Rabbit polyclonal to PARP1
- **Host species**: Rabbit
- **Tested applications**: Suitable for: IHC-P, WB, ICC/IF
- **Species reactivity**: Reacts with: Mouse, Rat, Human
- **Immunogen**: Synthetic peptide within Human PARP1 aa 150-250. The exact sequence is proprietary. Database link: P09874
- **Positive control**: WB: Extracts from A549, Jurkat, HeLa, K562, Raji, HepG2 and Y79 cell lines. Mouse testis lysate. ICC/IF: NIH/3T3 and U-2 OS cells.

**Properties**
- **Form**: Liquid
- **Storage buffer**: pH: 7.30
  - Preservative: 0.02% Sodium azide
  - Constituents: PBS, 50% Glycerol
- **Purity**: Immunogen affinity purified
- **Clonality**: Polyclonal
- **Isotype**: IgG

**Applications**

Our Abpromise guarantee covers the use of ab194586 in the following tested applications.

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

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<td>IHC-P</td>
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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

**All lanes**: Anti-PARP1 antibody (ab194586) at 1/1000 dilution

**Lane 1**: Extract from A549 (Human lung carcinoma cell line) cell line
**Lane 2**: Extract from Jurkat (Human T cell leukemia cell line from peripheral blood) cell line
**Lane 3**: Extract from Hela (Human epithelial cell line from cervix adenocarcinoma) cell line
**Lane 4**: Extract from K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell line
**Lane 5**: Extract from Raji (Human Burkitt's lymphoma cell line) cell line
**Lane 6**: Extract from HepG2 (Human liver hepatocellular carcinoma cell line) cell line
**Lane 7**: Extract from Y79 (Human retinoblastoma cell line) cell line

**Predicted band size**: 113 kDa
U-2 OS (Human bone osteosarcoma epithelial cell line) cells stained for PARP1 using ab194586 at a dilution of 1/100 in ICC/IF. Blue: DAPI for nuclear staining.

Immunohistochemistry of Human breast cancer tissue staining PARP1 with ab194586
Immunohistochemistry of Human appendix tissue staining PARP1 with ab194586

Immunohistochemistry of rat testis tissue staining PARP1 with ab194586
NIH-3T3 (Mouse embryo fibroblast cell line) cells stained for PARP1 using ab194586 at a dilution of 1/100 in ICC/IF. Blue: DAPI for nuclear staining.

Anti-PARP1 antibody (ab194586) at 1/1000 dilution + Mouse testis lysate at 25 µg

Secondary
HRP Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Developed using the ECL technique.

Predicted band size: 113 kDa

Exposure time: 90 seconds

Blocking buffer: 3% non-fat dry milk in TBST.

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

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