

PARP-1 N-terminal antibody (pAb)

Catalog Nos: 61639, 61640

RRID: AB_2793715

Application(s): ChIP-Seq, CUT&Tag, IP, WB

Reactivity: Human

Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Rabbit

Isotype: IgG

Concentration: 1 µg/µl

Molecular Weight: 120 kDa

Background: PARP-1 N-terminal (ADPRT) encodes a chromatin-associated enzyme, poly(ADP-ribose)transferase, that modifies various nuclear proteins by poly(ADP-ribose)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation and tumor transformation. It also plays a role in the regulation of the molecular events involved in the recovery of cells from DNA damage. Cleavage of PARP-1 (ADPRT) occurs following caspase activation during apoptosis.

For additional information on PARP-1, please see the review article PARP-1: An Abundant and Ubiquitous Protein with Roles in Many Cellular Processes in the Targets & Applications section of our website.

Immunogen: This antibody was raised against a His-Tagged fusion protein corresponding to the N-terminal half of human PARP-1.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, a sera version (Catalog No. 39559) of this antibody is also available.

Application Notes:

Applications Validated by Active Motif:

ChIP-Seq: 5 µg per ChIP

IP: 10 µg per IP

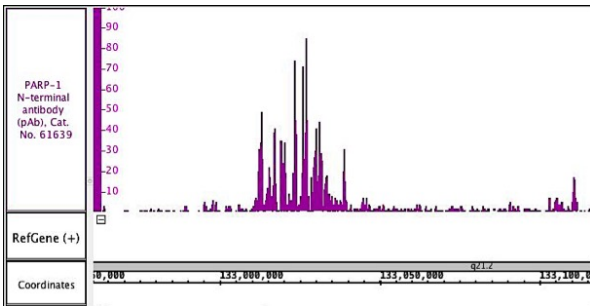
WB*: 0.2 - 1 µg/ml dilution

CUT&Tag: 1 µl per 50 µl reaction

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

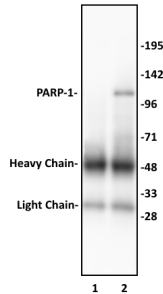
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



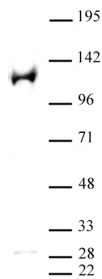
PARP-1 N-terminal antibody (pAb) antibody (rAb) tested by ChIP-Seq.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from human NCI-H209 lung cancer cells and 5 µg of PARP-1 N-terminal antibody (pAb). ChIP DNA was sequenced on the Illumina NextSeq and 7.7 million sequence tags were mapped to identify PARP binding sites on chromosome 2.



PARP-1 N-terminal antibody (pAb) tested by Immunoprecipitation.

10 µg of PARP-1 antibody was used to immunoprecipitate PARP-1 from 250 µg of HeLa nuclear cell extract (lane 2). 10 µg of rabbit IgG was used as a negative control (lane 1). The immunoprecipitated protein was detected by Western blotting using the PARP-1 antibody at a dilution of 1 µg/ml.



PARP-1 N-terminal antibody (pAb) tested by Western blot.

HeLa nuclear extract (25 µg) was probed with PARP-1 N-terminal antibody at a dilution of 1 µg/ml.