Product Datasheet

PARP10 Antibody - BSA Free
NB100-2157

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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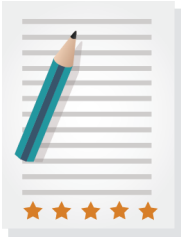
Publications: 5

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB100-2157

Updated 9/9/2025 v.20.1



NB100-2157

PARP10 Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris-Citrate/Phosphate (pH 7.0 - 8.0)

Product Description

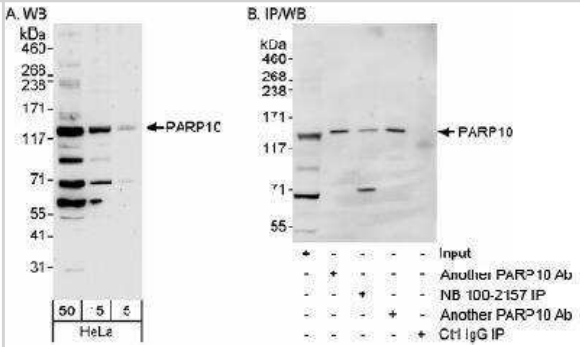
Description	Novus Biologicals Rabbit PARP10 Antibody - BSA Free (NB100-2157) is a polyclonal antibody validated for use in IHC, WB and IP. Anti-PARP10 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	84875
Gene Symbol	PARP10
Species	Human
Immunogen	The immunogen recognized by this antibody maps to a region between residue 300 and 350 of Poly (ADP-ribose) Polymerase Family, member 10 using the numbering given in entry NP_116178.1 (GeneID 84875)

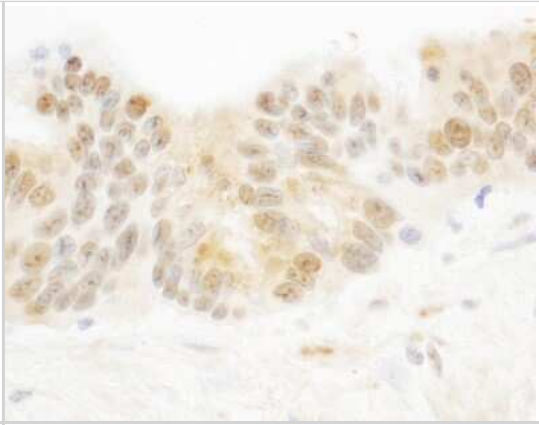
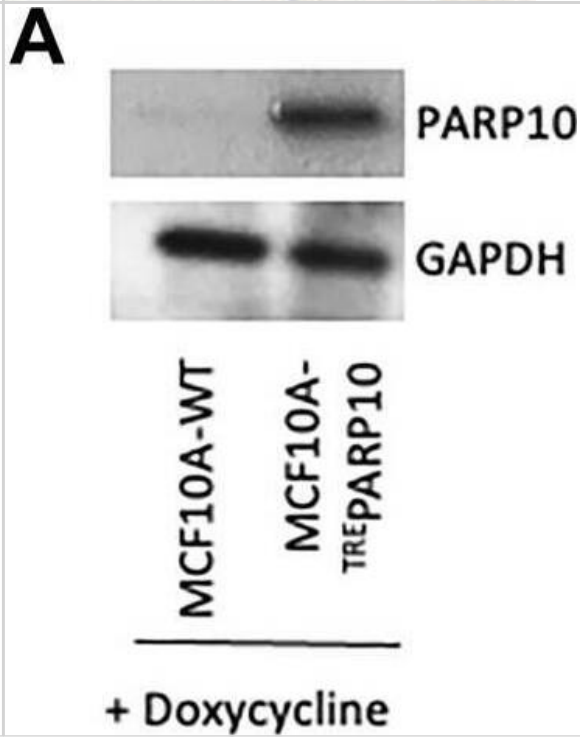
Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500-1:2500, Immunohistochemistry 1:500 -1:2000, Immunoprecipitation 1-4 ug/mg of lysate, Immunohistochemistry-Paraffin 1:500 - 1:2000
Application Notes	Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

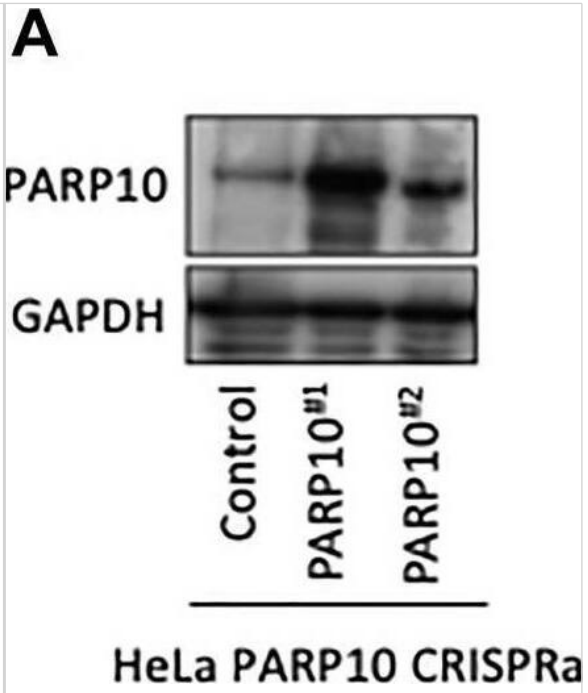
Images

Western Blot: PARP10 Antibody [NB100-2157] - Detection of Human PARP10 on HeLa whole cell lysate using NB100-2157. PARP10 was also immunoprecipitated using other rabbit anti-PARP10 antibodies.



Immunohistochemistry-Paraffin: PARP10 Antibody [NB100-2157] - Human ovarian carcinoma. Antibody: Affinity purified rabbit anti-PARP10 used at a dilution of 1:1,000 (1ug/ml). Detection: DAB	
Identification of genes necessary for proliferation of PARP10-overexpressing MCF10A breast epithelial cells by CRISPR-mediated genome-wide loss-of-function screening.(A) Western blot showing doxycycline-induced overexpression of PARP10 in MCF10A cells. (B) Overview of the CRISPR knockout screens to identify genes that are specifically required for proliferation of PARP10-overexpressing MCF10A cells. (C) Scatterplot showing the results of genome-wide CRISPR knockout screens to identify genes that are specifically required for proliferation of PARP10-overexpressing MCF10A cells. Each gene targeted by the library was ranked according to the MAGeCK score indicating genes which, when inactivated, specifically cause reduced proliferation in PARP10-overexpressing MCF10A-TREPARP10 cells compared to control MCF10A cells. Top hits chosen for validation are indicated. (D, E) Biological pathway analyses using KEGG (D) or Gene Ontology (E) analyses of the top hits with p-values lower than 0.02 which specifically cause reduced proliferation in PARP10-overexpressing MCF10A-TREPARP10 cells compared to control MCF10A cells. KEGG terms with negative logP greater than 1 are shown. GO_BP terms with negative logP greater than 1.24 are presented (corresponding to the top 20 pathways). Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/36187556), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Functional interaction between ATM and PARP10 expression.(A) Western blot showing overexpression of PARP10 in two independent HeLa PARP10 CRISPRa cell lines. (B) CellTiterGlo cellular proliferation assays showing that knockdown of ATM, using two separate siRNA oligonucleotides, specifically reduces the proliferation of two different PARP10-overexpressing CRISPRa HeLa cell lines compared to control HeLa cells. The average of three experiments is shown (normalized to control siRNA). Error bars represent standard deviations, and asterisks indicate statistical significance (t-test, two-tailed, unpaired). (C) DNA fiber combing assays showing that ATM depletion does not differentially impact replication fork progression in PARP10-overexpressing CRISPRa HeLa cell lines compared to control HeLa cells. Replication tracts labeled by both IdU and CldU, indicating ongoing replication forks, were quantified, and their labeled tract length (IdU+CldU) is presented, with the median values marked on the graph and listed at the top. At least 60 tracts were quantified for each sample. Asterisks indicate statistical significance (Mann-Whitney test). A schematic representation of the assay conditions is shown at the top. (D–F) ATM SIRF experiments showing that PARP10 overexpression in HeLa cells increases HU-induced ATM binding to nascent DNA. HeLa cells were treated with 4 mM HU for 3 hours. ATM depletion was used as control, to demonstrate the specificity of the SIRF signal. Representative micrographs (D) and quantifications (E, F) are shown. Bars indicate the mean values, error bars represent standard errors, and asterisks indicate statistical significance (t-test, two-tailed, unpaired). Schematic representations of the assay conditions are shown at the top. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/36187556), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Khatib JB, Schleicher EM, Jackson LM et al. Complementary CRISPR genome-wide genetic screens in PARP10-knockout and overexpressing cells identify synthetic interactions for PARP10-mediated cellular survival Oncotarget 2022-09-28 [PMID: 36187556] (Western Blot)

Dhoonmoon A, Nicolae CM, Moldovan GL The KU-PARP14 axis differentially regulates DNA resection at stalled replication forks by MRE11 and EXO1 Nature communications 2022-08-27 [PMID: 36030235] (WB, KD, Human)

Details:
Supplementary Figure S1. H: Western blots confirming knockdowns of ZRANB3 and PARP10 in HeLa-BRCA2KO cells.

Schleicher E M, Galvan A M et al. PARP10 promotes cellular proliferation and tumorigenesis by alleviating replication stress. Nucleic Acids Res 2018-09-28 [PMID: 30032250] (WB, Human)

Shahrour MA, Nicolae CM, Edvardson S et al. PARP10 deficiency manifests by severe developmental delay and DNA repair defect Neurogenetics 2016-09-13 [PMID: 27624574] (WB, Human)

Nicolae CM, Aho ER, Vlahos AH et al. The ADP-ribosyltransferase PARP10/ARTD10 interacts with Proliferating Cell Nuclear Antigen (PCNA) and is required for DNA damage tolerance. J Biol Chem 2014-04-07 [PMID: 24695737] (WB)

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Products Related to NB100-2157

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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