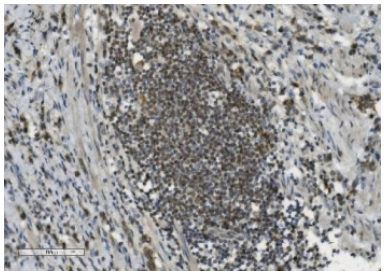
PARP1 Antibody / PARP [clone 2I2H4] (RQ6271)

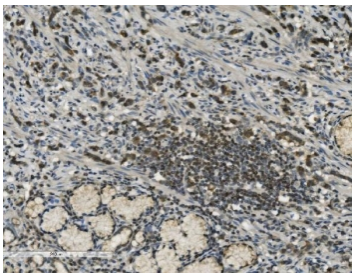
Catalog No.	Formulation	Size
RQ6271	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

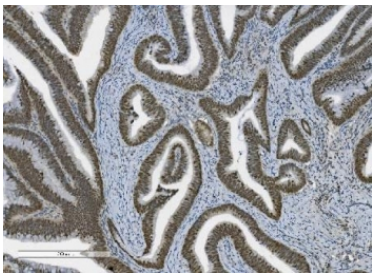
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	2I2H4
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P09874
Localization	Nuclear
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This PARP1 antibody is available for research use only.



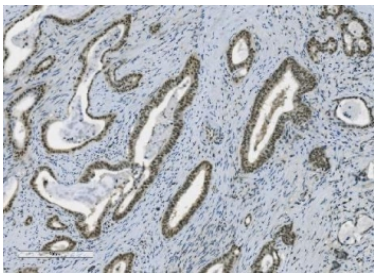
PARP1 Antibody Stomach Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human poorly differentiated stomach adenocarcinoma tissue using PARP1 antibody. Tumor cell nuclei demonstrate strong HRP-DAB brown staining consistent with the chromatin-associated localization of PARP1 in DNA repair, genomic instability adaptation, and nuclear stress-response signaling pathways active in poorly differentiated gastric carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



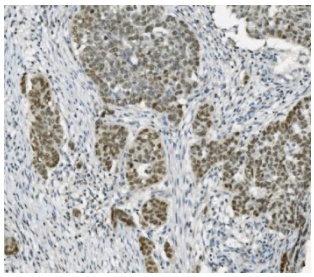
PARP1 Antibody Diffuse Gastric Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human poorly differentiated stomach adenocarcinoma tissue using PARP1 antibody. Tumor cell nuclei demonstrate widespread HRP-DAB brown staining consistent with the chromatin-associated activity of PARP1 in DNA strand break repair, genomic maintenance, and nuclear stress-response signaling pathways within aggressive gastric carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



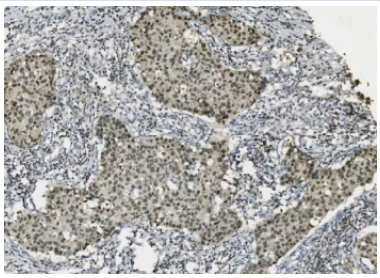
PARP1 Antibody Rectal Cancer IHC. Immunohistochemistry analysis of FFPE human rectal cancer tissue using PARP1 antibody. Tumor epithelial cell nuclei demonstrate strong HRP-DAB brown staining consistent with the chromatin-associated localization of PARP1 in DNA repair, genomic surveillance, and cellular stress-response signaling pathways within proliferative colorectal carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



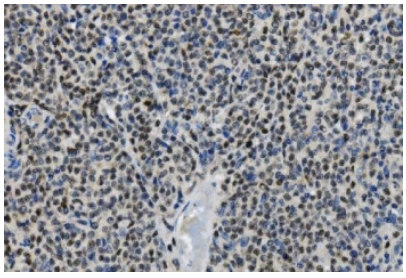
PARP1 Antibody Gallbladder Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human gallbladder adenocarcinoma tissue using PARP1 antibody. Tumor epithelial cell nuclei demonstrate strong HRP-DAB brown staining consistent with the chromatin-associated localization of PARP1 in DNA repair, genomic stability maintenance, and nuclear stress-response signaling pathways within gland-forming biliary carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



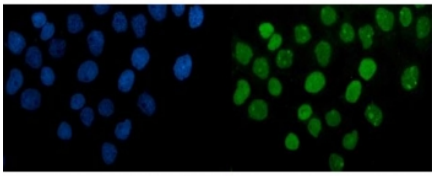
PARP1 Antibody Adnexal Serous Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human adnexal serous adenocarcinoma tissue using PARP1 antibody. Tumor cell nuclei demonstrate prominent HRP-DAB brown staining consistent with the chromatin-associated localization of PARP1 in DNA strand break repair, genomic instability adaptation, and nuclear stress-response signaling pathways within high-grade serous carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



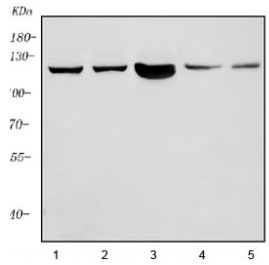
PARP1 Antibody Breast Cancer IHC. Immunohistochemistry analysis of FFPE human breast cancer tissue using PARP1 antibody. Tumor cell nuclei demonstrate diffuse HRP-DAB brown staining consistent with the chromatin-associated activity of PARP1 in DNA repair, genomic stability maintenance, and nuclear stress-response signaling pathways within proliferative breast carcinoma tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



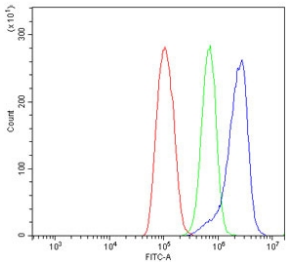
PARP1 Antibody Lymphoma IHC. Immunohistochemistry analysis of FFPE human lymphoma tissue using PARP1 antibody. Neoplastic lymphoid cell nuclei demonstrate strong HRP-DAB brown staining consistent with the chromatin-associated localization of PARP1 in DNA repair, genomic surveillance, and proliferative nuclear stress-response signaling pathways within malignant lymphoid tissue. Nuclei are counterstained blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling prior to staining.



PARP1 Antibody A431 IF. Immunofluorescence analysis of human A431 cells using PARP1 antibody. PARP1 staining (green) demonstrates strong nuclear localization consistent with the chromatin-associated role of this repair protein in DNA strand break signaling, genomic stability maintenance, and nuclear stress-response pathways. Nuclei are counterstained blue with DAPI. Heat-induced epitope retrieval was performed by steaming sections in pH6 citrate buffer for 20 minutes prior to staining.



PARP1 Antibody Multi-Species Tissue WB. Western blot analysis of human, rat, and mouse lysates using PARP1 antibody. Lane 1: human MCF7 lysate, Lane 2: human HeLa lysate, Lane 3: human HEK293 lysate, Lane 4: rat testis lysate, Lane 5: mouse testis lysate. A prominent band is detected near 116 kDa, consistent with the predicted molecular weight of full-length PARP1. The broad cross-species detection pattern supports the conserved chromatin-associated role of PARP1 in DNA repair, genomic stability maintenance, and nuclear stress-response signaling pathways across proliferative mammalian tissues and cell lines.



PARP1 Antibody ThP-1 FACS. Flow cytometry analysis of human ThP-1 cells using PARP1 antibody at 1 ug/million cells. Blue histogram represents PARP1 antibody staining, green represents isotype control, and red represents unstained cells alone. The rightward fluorescence shift observed with PARP1 staining is consistent with intracellular detection of this chromatin-associated repair protein involved in DNA damage signaling, genomic maintenance, and nuclear stress-response pathways in monocytic leukemia cells. Cells were blocked with goat sera prior to staining.

Description

PARP1 Antibody specifically detects Poly [ADP-ribose] polymerase 1 (PARP1), also known as ADPRT or PPOL, an enzyme that in humans is encoded by the PARP1 gene. PARP1 gene is mapped to 1q42.12. This gene encodes a chromatin-associated enzyme, poly(ADP-ribosyl)transferase, which modifies various nuclear proteins by poly(ADP-ribosyl)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 and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes.

Additional PARP1 pathway and chromatin-associated DNA repair studies may benefit from our PARP1 antibody page featuring recombinant rabbit monoclonal clone CFD-16 with knockdown-validated target recognition.

Application Notes

Optimal dilution of the PARP1 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids Q670-R858) was used as the immunogen for the PARP1 antibody.

Storage

After reconstitution, the PARP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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