

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PARP in ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 839120
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PARP Thr373-Glu540 Accession # P09874
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

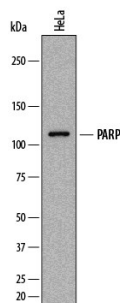
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below
Knockout Validated	PARP is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in PARP knockout HEK293T cell line.	

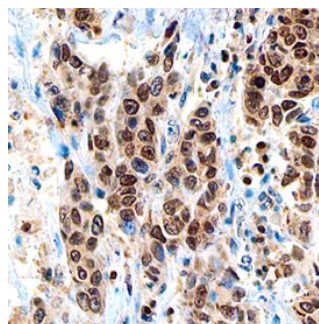
DATA

Western Blot



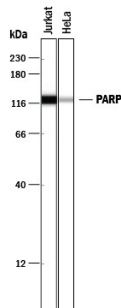
Detection of Human PARP by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human PARP Monoclonal Antibody (Catalog # MAB8095) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for PARP at approximately 110 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



PARP in Human Breast. PARP was detected in immersion fixed paraffin-embedded sections of human breast using Mouse Anti-Human PARP Monoclonal Antibody (Catalog # MAB8095) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the nuclei of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

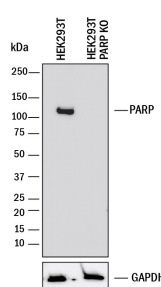
Simple Western



Detection of Human PARP by Simple Western™. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line and HeLa human cervical epithelial carcinoma cell line, loaded at 0.5 mg/mL. A specific band was detected for PARP at approximately 125 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human PARP Monoclonal Antibody (Catalog # MAB8095). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Knockout Validated



Western Blot Shows Human PARP Specificity by Using Knockout Cell Line. Western blot shows lysates of HEK293T human embryonic kidney parental cell line and PARP knockout HEK293T cell line (KO). PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human PARP Monoclonal Antibody (Catalog # MAB8095) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for PARP at approximately 120 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in knockout HEK293T cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PARP, Poly [ADP-ribose] polymerase 1 (PARP1), is a widely expressed component of a base excision repair (BER) complex, containing at least XRCC1, PARP2, POLB and LIG3. PARP expression is correlated with proliferation, with higher levels occurring during early fetal development and organogenesis and in the highly proliferative cell compartments of adult. PARP is upregulated in B cells that have been induced to switch to various Ig isotypes. PARP interacts with the DNA polymerase alpha catalytic subunit POLA1; this interaction functions as part of the control of replication fork progression.