

**PARP-1 (Cleaved p25) Rabbit Monoclonal Antibody  
Product Data Sheet**

**Catalog #1051-1**

Clone ID: E51      Lot #: C03116  
Quantity: 100 µl  
Type: Rabbit Monoclonal IgG  
Species Cross-reactivity:  Human  Mouse  Rat  
Applications:  WB  IHC  ICC  Flow Cytometry  IP  
Molecular Wt.: 25 kDa  
UniProt ID: P09874

**Background:** Poly (ADP-ribose) polymerase (PARP) is zinc-dependent DNA binding protein that recognizes DNA strand breaks and is presumed to play a role in DNA repair (1). As a marker for apoptosis, PARP is cleaved in vitro by many caspases, and in vivo by Caspase-3 (2,3). Existing as a 116 kDa nuclear protein, PARP is cleaved between amino acids Asp214 and Gly215 to yield two fragments of 29 kDa and 85 kDa (2,4).

**Specificity:** A synthetic peptide corresponding to residues before the cleavage site of human PARP-1 was used as immunogen. The antibody only recognize p25 cleaved-form of PARP-1.

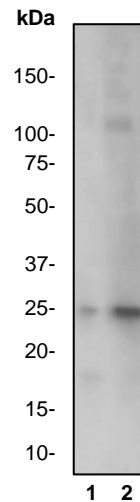
**Storage Conditions:** Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

**Recommended Dilutions:**

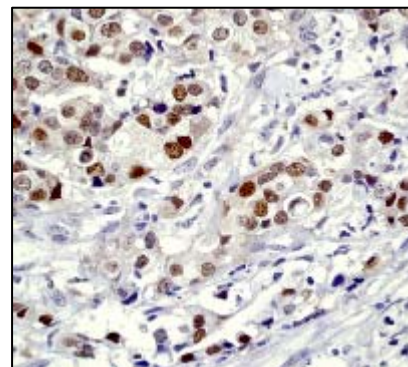
WB: 1:50,000 - 100,000  
IHC: 1:100  
ICC: 1:250  
Flow Cytometry: 1:50  
IP: 1:50

**Background References:**

1. Ikejima, M, et al. The zinc fingers of human poly(ADP-ribose) polymerase are differentially required for the recognition of DNA breaks and nicks and the consequent enzyme activation. Other structures recognize intact DNA. *J. Biol. Chem.* 265: 21907–13 (1990).
2. Lazebnik, Y.A., et al. Cleavage of poly(ADP-ribose) polymerase by a proteinase with properties like ICE. *Nature* 371: 346–347 (1994).
3. Tewari, M, et al. Yama/CPP32 beta, a mammalian homolog of CED-3, is a CrmA-inhibitable protease that cleaves the death substrate poly(ADP-ribose) polymerase. *Cell* 81: 801–9 (1995).
4. Kaufmann, S.H., et al. Specific proteolytic cleavage of poly(ADP-ribose) polymerase: An early marker of chemotherapy-induced apoptosis. *Cancer Res.* 53: 2976–3985 (1993).



**Fig 1.** Western blot analysis on Jurkat cell lysate using anti-PARP-1 (Cleaved p25) RabMab (cat. #1051-1), 1:50,000 dilution. Cells were either (1) untreated or (2) treated with Camptothecin.



**Fig 2.** Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-PARP-1 (Cleaved p25) RabMab (cat. #1051-1).

Product QC'd by: \_\_\_\_\_

**For research use only. Not for use in diagnostic or therapeutic applications.**

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com).