

#9542
Store at -20C

PARP Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, W-S	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 89, 116	Source/Isotype: Rabbit	UniProt ID: #P09874	Entrez-Gene Id: 142
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Product Usage Information**Application**Western Blotting
Simple Western™**Dilution**1:1000
1:10 - 1:50**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PARP Antibody detects endogenous levels of full length PARP1 (116 kDa), as well as the large fragment (89 kDa) of PARP1 resulting from caspase cleavage. The antibody does not cross-react with related proteins or other PARP isoforms.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the caspase cleavage site in PARP. Antibodies are purified by protein A and peptide affinity chromatography.

BackgroundPARP, a 116 kDa nuclear poly (ADP-ribose) polymerase, appears to be involved in DNA repair in response to environmental stress (1). This protein can be cleaved by many ICE-like caspases *in vitro* (2,3) and is one of the main cleavage targets of caspase-3 *in vivo* (4,5). In human PARP, the cleavage occurs between Asp214 and Gly215, which separates the PARP amino-terminal DNA-binding domain (24 kDa) from the carboxy-terminal catalytic domain (89 kDa) (2,4). PARP helps cells to maintain their viability; cleavage of PARP facilitates cellular disassembly and serves as a marker of cells undergoing apoptosis (6).**Background References**

1. Satoh, M.S. and Lindahl, T. (1992) *Nature* 356, 356-358.
2. Lazebnik, Y. A. et al. (1994) *Nature* 371, 346-347.
3. Cohen, G.M. (1997) *Biochem. J.* 326, 1-16.
4. Nicholson, D. W. et al. (1995) *Nature* 376, 37-43.
5. Tewari, M. et al. (1995) *Cell* 81, 801-809.
6. Oliver, F.J. et al. (1998) *J. Biol. Chem.* 273, 33533-33539.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**Applications Key****W:** Western Blotting **W-S:** Simple Western™**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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