

#9542 Store at -20°C

## PARP Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, W-S	H M R Mk	Endogenous	89, 116	Rabbit	#P09874	142

<b>Product Usage Information</b>	<b>Application</b> Western Blotting Simple Western™	<b>Dilution</b> 1:1000 1:10 - 1:50
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	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.	
<b>Source / Purification</b>	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.	
<b>Background</b>	PARP, 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 <i>in vitro</i> (2,3) and is one of the main cleavage targets of caspase-3 <i>in vivo</i> (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).	
<b>Background References</b>	1. Satoh, M.S. and Lindahl, T. (1992) <i>Nature</i> 356, 356-358. 2. Lazebnik, Y. A. et al. (1994) <i>Nature</i> 371, 346-347. 3. Cohen, G.M. (1997) <i>Biochem. J.</i> 326, 1-16. 4. Nicholson, D. W. et al. (1995) <i>Nature</i> 376, 37-43. 5. Tewari, M. et al. (1995) <i>Cell</i> 81, 801-809. 6. Oliver, F.J. et al. (1998) <i>J. Biol. Chem.</i> 273, 33533-33539.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting <b>W-S:</b> Simple Western™
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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