

# Cleaved PARP (Asp214) Antibody (Rat Specific)

✓ 100 µl  
(10 western blots)

**Orders** ■ 877-616-CELL (2355)  
orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
info@cellsignal.com  
**Web** ■ www.cellsignal.com

rev. 09/13/09

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

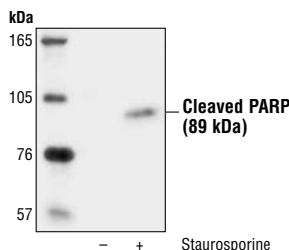
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	R	89 kDa	Rabbit**

**Background:** 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 *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).

(This product is sold under license from Promega Corp., U.S. Patent No. 6,350,452.)

**Specificity/Sensitivity:** Cleaved PARP (Asp214) Antibody (Rat Specific) detects endogenous levels of the large fragment of rat PARP1 (89 kDa) resulting from caspase cleavage. The antibody does not recognize full length PARP1 or other PARP isoforms.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to carboxy terminus residues surrounding Asp214 in rat PARP. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of C6 cells, untreated or staurosporine-treated (1 µM), using Cleaved PARP (Asp214) Antibody (Rat Specific).

**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.

Entrez-Gene ID #142  
Swiss-Prot Acc. #P09874

**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.

\*Species cross-reactivity is determined by western blot.

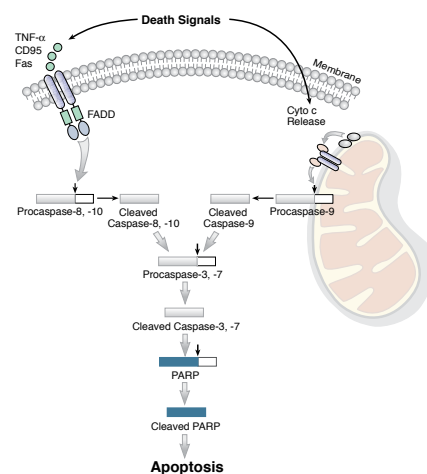
\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.



**IMPORTANT:** For western blots, incubate membrane with diluted 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 IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.