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Store at -20C
#9546

Cleaved PARP (Asp214) (19F4) Mouse mAb

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H Mk	Endogenous	89	Mouse IgG1	#P09874	142

Product Usage Information

Application

Western Blotting

Dilution

1:2000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Cleaved PARP (Asp214) (19F4) Mouse mAb (Human Specific) detects endogenous levels of the large fragment (89 kDa) of PARP1 resulting from cleavage at aspartic acid 214. This antibody will detect high levels of full length PARP.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic PARP peptide corresponding to carboxy-terminal residues surrounding Asp214 in human PARP.

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.)

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

Cross-Reactivity Key

H: Human **Mk:** Monkey

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