



Orders: 877-616-CELL (2355)
orders@cellsignal.com

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Web: info@cellsignal.com
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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Smac/Diablo (79-1-83) Mouse mAb

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

Applications: W, IP, IHC-P	Reactivity: H Mk	Sensitivity: Endogenous	MW (kDa): 21	Source/Isotype: Mouse IgG	UniProt ID: #Q9NR28	Entrez-Gene Id: 56616
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Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:100
1:400

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.

For a carrier free (BSA and azide free) version of this product see product #19293.

Specificity/Sensitivity

Smac/Diablo (79-1-83) Mouse mAb detects endogenous levels of processed and unprocessed human Smac/Diablo. The antibody reacts weakly with mouse and rat Smac/Diablo.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a full length peptide corresponding to human Smac/Diablo raised in E-coli.

Background

Smac/Diablo is a 21 kDa mammalian mitochondrial protein that functions as a regulatory component during apoptosis (1,2). Upon mitochondrial stress, Smac/Diablo is released from mitochondria and competes with caspases for binding of IAPs (inhibitor of apoptosis proteins) (1,2). The interaction of Smac/Diablo with IAPs relieves the inhibitory effect of the IAPs on caspases (3,4). This interaction involves mainly the amino-terminal residues of Smac/Diablo with the BIR3 region of XIAP, supplemented with several other hydrophobic interactions between the helical structures of Smac/Diablo and other areas of BIR3 (5,6).

Background References

- Du, C. et al. (2000) *Cell* 102, 33-42.
- Verhagen, A.M. et al. (2000) *Cell* 102, 43-53.
- Srinivasula, S.M. et al. (2001) *Nature* 410, 112-6.
- Srinivasula, S.M. et al. (2000) *J Biol Chem* 275, 36152-7.
- Liu, Z. et al. (2000) *Nature* 408, 1004-8.
- Wu, G. et al. (2000) *Nature* 408, 1008-12.

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 **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **Mk:** Monkey

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