

#2954 Store at -20C

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



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

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.

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

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

WB: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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