

Instruction Manual

Catalog Number	PK-AB718-2409
Synonyms	Smac Antibody: DIABLO
Description	The inhibitor of apoptosis proteins (IAPs) regulate programmed cell death by inhibiting members of the caspase family of enzymes. A novel mammalian protein that binds to IAPs and neutralizes the inhibitory effect of IAPs on caspases was recently identified and designated Smac/DIABLO. Smac/DIABLO is a mitochondrial protein that is released along with cytochrome c during apoptosis and activates cytochrome c/Apaf-1/caspase-9 pathway. Analysis of the structural basis of Smac/DIABLO reveals that the N-terminal amino acids are required for binding of Smac/DIABLO to IAPs and activation of caspases. Smac/DIABLO is expressed in a variety of human and mouse tissues.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal Smac antibody was raised against a peptide (EERAASEQEQAYLRED) corresponding to amino acids 225 to 239 of human Smac/DIABLO .
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. h application have to be determined individually. Smac antibody can be used for detection of Smac/DIABLO by Western blot at 1 µg/mL. A 25 kDa band can be detected. Smac antibody can also be used to detect Smac/DIABLO by immunohistochemistry at 5 µg/mL.
Images	Available upon request.
References	Du C, Fang M, Li Y, Li L, Wang X. Smac, a mitochondrial protein that promotes cytochrome c-dependent caspase activation by eliminating IAP inhibition. <i>M Cell.</i> 2000;102(1):33-42. Verhagen AM, Ekert PG, Pakusch M, Silke J, Connolly LM, Reid GE, Moritz RL, Simpson RJ, Vaux DL. Identification of DIABLO, a mammalian protein that promotes apoptosis by binding to and antagonizing IAP proteins. <i>Cell.</i> 2000;102(1):43-53. Srinivasula SM, Datta P, Fan XJ, Fernandes-Alnemri T, Huang Z, Alnemri ES. Molecular Determinants of the Caspase-promoting Activity of Smac/DIABLO and Its Role in the Death Receptor Pathway. <i>J Biol Chem.</i> 2000;275(46):36152-36157. Chai J, Du C, Wu JW, Kyin S, Wang X, Shi Y. Structural and biochemical basis of apoptotic activation by Smac/DIABLO. <i>Nature.</i> 2000;406(6798):855-62.
Images	Available upon request.
Related Products	Heart Lysate, Cat. No. PK-AB718-1301 Smac / DIABLO Peptide, Cat. No. PK-AB718-2409P

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