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SMAC Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6820b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9NR28
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20755
Calculated MW	27131
Antigen Region	211-239

Additional Information

Gene ID	56616
Other Names	Diablo homolog, mitochondrial, Direct IAP-binding protein with low pI, Second mitochondria-derived activator of caspase, Smac, DIABLO, SMAC
Target/Specificity	This SMAC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 211-239 amino acids from the C-terminal region of human SMAC.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SMAC Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DIABLO (HGNC:21528)
Function	Promotes apoptosis by activating caspases in the cytochrome c/Apaf-1/caspase-9 pathway. Acts by opposing the inhibitory activity of

	inhibitor of apoptosis proteins (IAP). Inhibits the activity of BIRC6/BRUCE by inhibiting its binding to caspases (PubMed:15200957, PubMed:36758104, PubMed:36758105, PubMed:36758106).
Cellular Location	Mitochondrion. Cytoplasm, cytosol Note=Released into the cytosol in a PARL-dependent manner when cells undergo apoptosis.
Tissue Location	Ubiquitously expressed with highest expression in testis. Expression is also high in heart, liver, kidney, spleen, prostate and ovary. Low in brain, lung, thymus and peripheral blood leukocytes. Isoform 3 is ubiquitously expressed

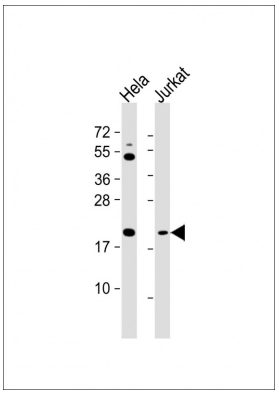
Background

SMAC is an inhibitor of apoptosis protein (IAP)-binding protein. This mitochondrial protein enters the cytosol when cells undergo apoptosis, and it moderates the caspase inhibition of IAPs.

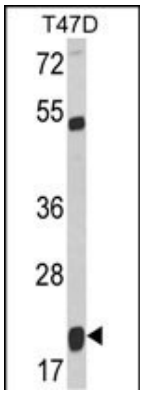
References

Carbone,A., et.al., Genes Chromosomes Cancer 47 (12), 1067-1075 (2008)

Images

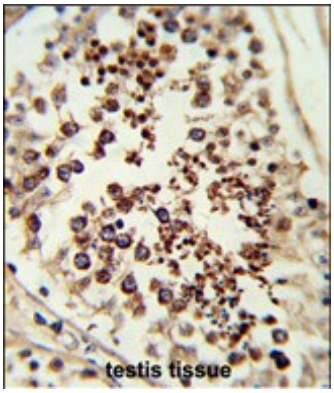


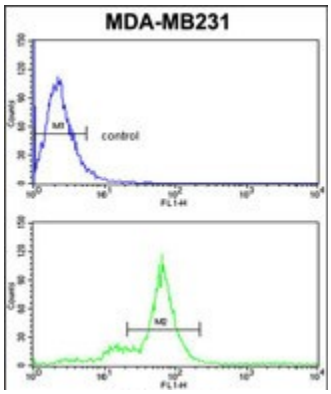
All lanes : Anti-SMAC Antibody (C-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of SMAC Antibody (C-term) (Cat. #AP6820b) in T47D cell line lysates (35ug/lane). SMAC (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human testis tissue reacted with SMAC Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





SMAC Antibody (C-term) (Cat. #AP6820b) flow cytometric analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- A novel small-molecule inhibitor of mcl-1 blocks pancreatic cancer growth in vitro and in vivo.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.