Rabbit anti-Human SMAC Monoclonal Antibody | anti-DIABLO antibody

Recombinant Anti-SMAC Antibody, Rabbit Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA254839	**Rabbit**	**Human**	**Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, ELISA, Western Blot**

PRODUCT SYNONYMS

SMAC; Monoclonal Antibody; Recombinant Anti-SMAC Antibody; Rabbit Monoclonal; SMAC/Diablo Antibody; Rabbit MAb; diablo; IAP-binding mitochondrial protein; Anti-DFNA64 Antibody; Anti-SMAC Antibody; anti-DIABLO antibody

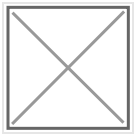
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	006
Specificity	Human SMAC/Diablo
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-DIABLO antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), ELISA, WB (Western Blot)
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Human SMAC/Diablo protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human SMAC/Diablo (rh SMAC/Diablo).
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES

FCM/FACS (Flow Cytometry)
Flow cytometric analysis of Human Diablo expression on HeLa cells. The cells were treated according to manufacturer's manual (BD Pharmingen'), stained with purified anti-Human Diablo (Filled hisgram), then a FITC-conjugated second step antibody. To demonstrate specificity of staining, the binding by 10339-R006 was blocked by preincubation of the purified antibody with 20ug recombinant human Diablo for 1 hour (Black solid line hisgram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.

IF (Immunofluorescence)
Immunofluorescence staining of Human Diablo in Hela cells. Cells were fixed with 4% PFA, permeabilzed with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human Diablo monoclonal antibody (1:60) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.



WB (Western Blot)
Anti-Diablo rabbit monoclonal antibody at 1:10000 dilutionLane A: Hela Whole Cell LysateLane B: Jurkat Whole Cell LysateLane C: A431 Whole Cell LysateLane D: MCF7 Whole Cell LysateLysates/proteins at 30 ug per lane.SecondaryGoat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.Developed using the Odyssey technique.Performed under reducing conditions.Predicted band size:22 kDaObserved band size:20 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-DIABLO antibody	Apoptosis is an essential processes required for normal development and homeostasis of all metazoan organisms. Second Mitochondria-Derived Activator of Caspases (Smac) or Direct IAP Binding Protein with low isoelectric point, pI (Diablo) is a proapoptogenic mitochondrial protein that is released to the cytosol in response to diverse apoptotic stimuli, including commonly used chemotherapeutic drugs. The current knowlege about structure and function of Smac/Diablo during programmed cell death, both in mitochondrial and receptor pathways are presented. It has been shown that Diablo mainly interacts with IAPs in the cytochrome c/Apaf-1/caspase-9 pathway, and promotes apoptosis. Diablo is released from the mitochondria into the cytosol occurring downstream of cytochrome c release in response to apoptotic stimuli such as irradiation, DNA damage or cytotoxic drugs. In the cytosol, Smac/Diablo interacts and antagonizes inhibitors of apoptosis proteins (IAPs), thus allowing the activation of caspases and apoptosis. This activity has prompted the synthesis of peptidomimetics that could potentially be used in cancer therapy. The role of Smac/DIABLO in colorectal carcinogenesis is ill defined. Data continues to accumulate to suggest that decreased levels of Smac/DIABLO may be important in chemoradiation-resistance to apoptosis in advanced colon cancer.
Product Categories/Family for anti-DIABLO antibody	Death Receptor Signaling
References	Korga A, et al. (2006) Role of mitochondrial protein Smac/Diablo in regulation of apoptotic pathways Pol Merkur Lekarski. 20(119): 573-6.Anguiano-Hernandez YM, et al. (2007) Smac/DIABLO and colon cancer. Anticancer Agents Med Chem. 7(4): 467-73.Martinez-Ruiz G, et al. (2008) Role of Smac/DIABLO in cancer progression. J Exp Clin Cancer Res. 27: 48.

NCBI AND UNIPROT INFORMATION

NCBI GI #	9845297
NCBI GeneID	56616
NCBI Accession #	NP_063940.1
NCBI GenBank Nucleotide #	NM_019887.4
UniProt Accession #	Q9NR28; Q6W3F3; Q96LV0; Q9BT11; Q9HAV6; B2RDQ0
Molecular Weight	27,131 Da
NCBI Official Full Name	diablo homolog, mitochondrial isoform 1
NCBI Official Synonym Full Names	diablo, IAP-binding mitochondrial protein
NCBI Official Symbol	DIABLO
NCBI Official Synonym Symbols	SMAC; SMAC3; DFNA64; DIABLO-S
NCBI Protein Information	diablo homolog, mitochondrial; 0610041G12Rik; mitochondrial Smac protein; direct IAP-binding protein with low pI; second mitochondria-derived activator of caspase
UniProt Protein Name	Diablo homolog, mitochondrial
UniProt Gene Name	**DIABLO**
UniProt Synonym Gene Names	SMAC; Smac

UniProt Entry Name	DBLOH_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/smac-antibody-clone-006-immunofluorescence-immunocytochemistry-flow-cytometry-western-blot-elisa/254839