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Anti-Smac/DIABLO (RABBIT) Antibody
Smac/Diablo Antibody
Catalog # ASR3686

Specification

Anti-Smac/DIABLO (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**This antibody was tested by immunoblot and reacts with human Smac/DIABLO protein. Lysates from human HeLa and LNCaP cells are positive for Smac/DIABLO. Other animal tissues have not been tested.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This whole rabbit serum was prepared by repeated immunizations with recombinant His6-tagged human Smac/DIABLO protein (amino acids 56-239).**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Smac/DIABLO (RABBIT) Antibody - Additional Information

Gene ID 56616

Other Names
56616

Purity
This antiserum is directed against human Smac/DIABLO and is useful in determining its presence in various assays.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Smac/DIABLO (RABBIT) Antibody - 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.

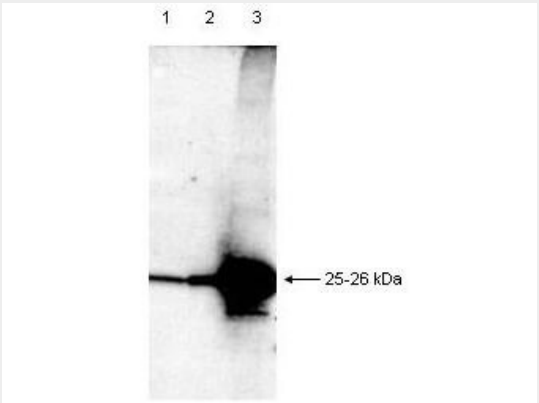
Tissue Location
Ubiquitously expressed with highest expression in testis. Expression is also high in heart, liver, kidney, spleen, prostate and ovary. Low in brain, lung, thymus and peripheral blood leukocytes. Isoform 3 is ubiquitously expressed

Anti-Smac/DIABLO (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Smac/DIABLO (RABBIT) Antibody - Images



Anti-Smac is shown to detect a 25-26 kDa band in partially purified recombinant human Smac protein by western blot. Lanes 1-3 are loaded with 1, 10 and 100 ng of protein per lane, respectively. The blot was incubated overnight with a 1:1000 dilution of anti-Smac in TBST. Detection occurs using a 1:1000 dilution of HRP Goat-a-Rabbit with visualization via ECL. Film exposure approximately 1'. Other detection systems will yield similar results.

Anti-Smac/DIABLO (RABBIT) Antibody - Background

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Apoptosis is a conserved cell suicide program essential for the development and homeostasis of multi-cellular organisms. Abnormal inhibition of apoptosis is a hallmark of cancer and autoimmune diseases, whereas excessive cell death is found in neurodegenerative disorders such as Alzheimers disease. Executioners of the apoptotic program are cysteine proteases termed caspases that exist as inactive zymogens in living cells and are activated during apoptosis. Active caspases cleave key intracellular protein substrates, resulting in the characteristic morphological changes associated with apoptosis. The release of cytochrome c from the mitochondria triggers the oligomerization of Apaf-1 in an ATP/dATP-dependent manner and induces the autoactivation of caspase-9. Active caspase-9 in turn activates downstream effector caspases including caspase -3, -6 and -7.