

Anti-Diablo/SMAC Picoband™ Antibody
Catalog # ABO12546

Specification

Anti-Diablo/SMAC Picoband™ Antibody - Product Information

Application	WB, IHC
Primary Accession	Q9NR28
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Diablo homolog, mitochondrial(DIABLO) detection. Tested with WB, IHC-P, ELISA in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Diablo/SMAC Picoband™ Antibody - 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

Calculated MW

27131 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
ELISA , 0.1-0.5 µg/ml, Human, Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Mitochondrion . Released into the cytosol when cells undergo apoptosis.

Tissue Specificity

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. .

Protein Name

Diablo homolog, mitochondrial

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E. coli-derived human Smac/Diablo recombinant protein (Position: A56-D239). Human Smac/Diablo

shares 88.6% amino acid (aa) sequence identity with mouse Smac/Diablo.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Diablo/SMAC Picoband™ 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](http://www.uniprot.org/citations/15200957)), PubMed:[36758104](http://www.uniprot.org/citations/36758104)), PubMed:[36758105](http://www.uniprot.org/citations/36758105)), PubMed:[36758106](http://www.uniprot.org/citations/36758106)).

Cellular Location

Mitochondrion. Cytoplasm, cytosol Note=Released into the cytosol in a PARL-dependent manner when cells undergo apoptosis.

Tissue Location

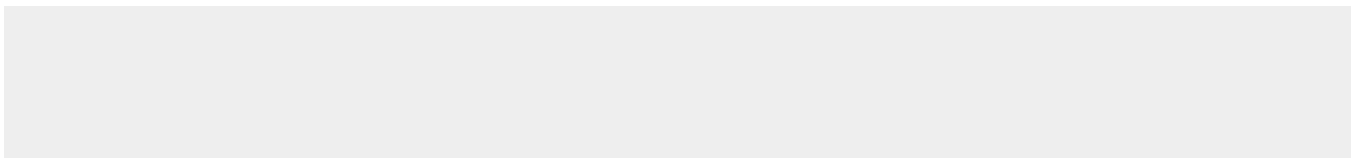
Ubiquitously expressed with highest expression in testis. Expression is also high in heart, liver, kidney, spleen, prostate and ovary. Low in brain, lung, thymus and peripheral blood leukocytes. Isoform 3 is ubiquitously expressed

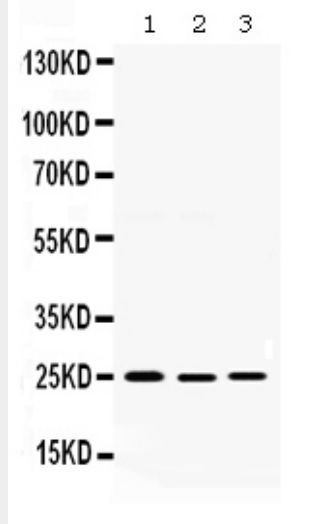
Anti-Diablo/SMAC Picoband™ Antibody - Protocols

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

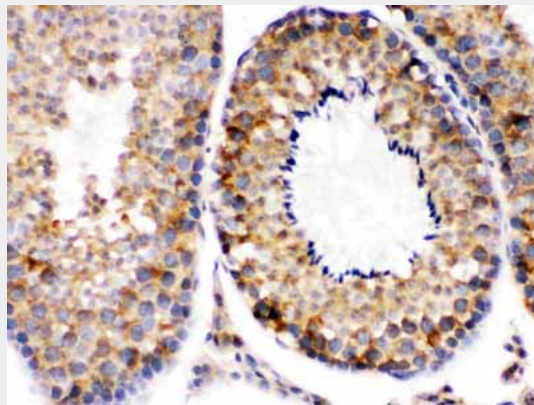
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Diablo/SMAC Picoband™ Antibody - Images

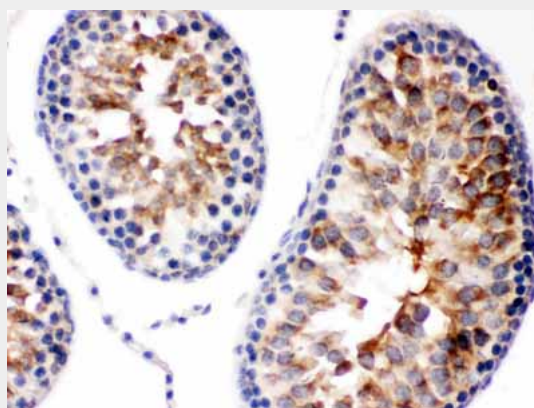




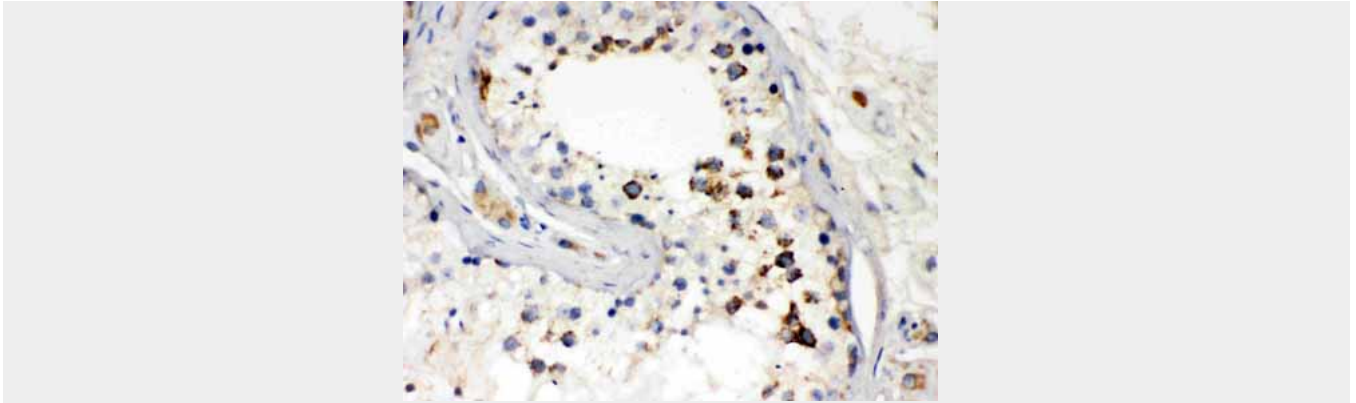
Western blot analysis of Smac/Diablo expression in rat testis extract (lane 1), 22RV1 whole cell lysates (lane 2) and SKOV whole cell lysates (lane 3). Smac/Diablo at 25KD was detected using rabbit anti- Smac/Diablo Antigen Affinity purified polyclonal antibody (Catalog # ABO12546) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



Smac/Diablo was detected in paraffin-embedded sections of mouse testis tissues using rabbit anti- Smac/Diablo Antigen Affinity purified polyclonal antibody (Catalog # ABO12546) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Smac/Diablo was detected in paraffin-embedded sections of rat testis tissues using rabbit anti- Smac/Diablo Antigen Affinity purified polyclonal antibody (Catalog # ABO12546) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Smac/Diablo was detected in paraffin-embedded sections of human testis tissues using rabbit anti- Smac/Diablo Antigen Affinity purified polyclonal antibody (Catalog # ABO12546) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Anti-Diablo/SMAC Picoband™ Antibody - Background

Diablo homolog (DIABLO), also referred to as a second mitochondria-derived activator of caspases or SMAC, is a mitochondrial protein that in humans is encoded by the DIABLO (direct IAP binding protein with low pI) gene on chromosome 12. The encoded mitochondrial protein enters the cytosol when cells undergo apoptosis, and allows activation of caspases by binding to inhibitor of apoptosis proteins. Overexpression of the encoded protein sensitizes tumor cells to apoptosis. A mutation in this gene is associated with young-adult onset of nonsyndromic deafness-64. Alternative splicing results in multiple transcript variants encoding different isoforms.