

For Research Use Only

Smac/DIABLO Polyclonal antibody

Catalog Number: 10434-1-AP

Featured Product

17 Publications



Basic Information

Catalog Number:

10434-1-AP

Size:

400 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0696

GenBank Accession Number:

BC011909

GeneID (NCBI):

56616

UNIPROT ID:

Q9NR28

Full Name:

diablo homolog (Drosophila)

Calculated MW:

27 kDa

Observed MW:

20 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, hamster

Positive Controls:

WB : HEK-293 cells, HeLa cells, HepG2 cells, mouse testis tissue, rat testis tissue

IP : HepG2 cells,

IHC : mouse testis tissue,

IF/ICC : HeLa cells,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Smac/DIABLO is a mitochondrial protein that promotes apoptosis by neutralizing members of the IAP family. SMAC/DIABLO is ubiquitously expressed in normal tissues, and the expression of SMAC messenger RNA (mRNA) in adult testis is the highest. Smac/DIABLO encodes a 239 amino acid protein (~27 kDa). The first 55 amino acids are a mitochondrial targeting signal peptide that is cleaved to generate mature Smac-DIABLO (~21 kDa). When released from mitochondria, Smac-DIABLO acts as a natural antagonist of inhibitor of apoptosis proteins (IAPs). Smac-DIABLO antagonistic activity is based on its N-terminal tetrapeptide (AVPI) that binds baculoviral IAP repeat (BIR) domains of IAPs, releasing their inhibitory effects on both initiator and effector caspases, thus promoting cell death. (PMID: 32325691, PMID: 32575872, PMID: 25650938)

Notable Publications

Author	Pubmed ID	Journal	Application
Hongtao Duan	29151915	Oncol Lett	WB
Tao Zhang	30187480	J Cell Physiol	WB
Yucong Xue	33173965	Mol. Med Rep	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

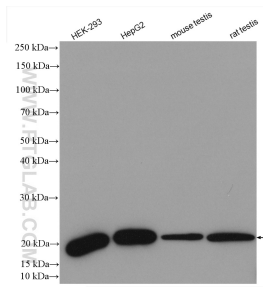
T: 4006900926

E: Proteintech-CN@ptglab.com

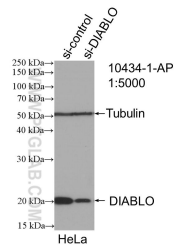
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

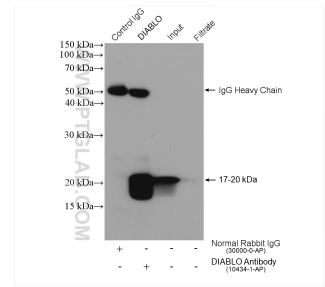
Selected Validation Data



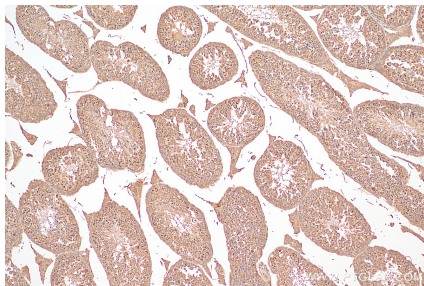
Various lysates were subjected to SDS PAGE followed by western blot with 10434-1-AP (DIABLO antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



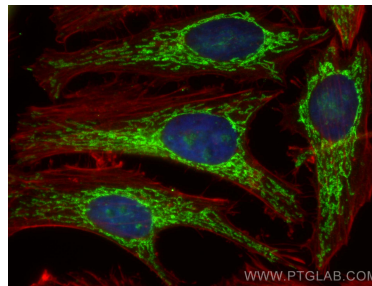
WB result of DIABLO antibody (10434-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-DIABLO transfected HeLa cells.



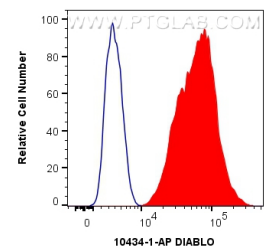
IP result of anti-DIABLO (IP:10434-1-AP, 4ug; Detection:10434-1-AP 1:2000) with HepG2 cells lysate 880 ug.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 10434-1-AP (DIABLO antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using DIABLO antibody (10434-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human DIABLO (10434-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).