

For Research Use Only

Smac/DIABLO Monoclonal antibody

Catalog Number: 68480-1-Ig



Basic Information

Catalog Number: 68480-1-Ig	GenBank Accession Number: BC011909	Purification Method: Protein G purification
Size: 150ul , Concentration: 500 ug/ml by Nanodrop;	GeneID (NCBI): 56616	CloneNo.: 2F12C9
Source: Mouse	UNIPROT ID: Q9NR28	Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:400-1:1600
Isotype: IgG1	Full Name: diablo homolog (Drosophila)	
Immunogen Catalog Number: AG32774	Calculated MW: 27 kDa	
	Observed MW: 20 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, rat	WB : U2OS cells, K-562 cells, LNCaP cells, HeLa cells, HEK-293 cells, Jurkat cells, HSC-T6 cells
	IF/ICC : HepG2 cells,

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)

Storage

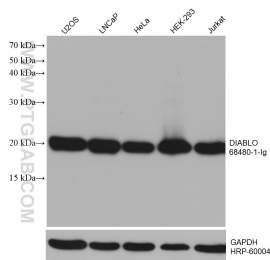
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

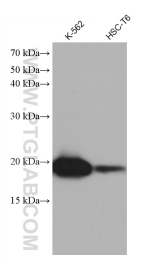
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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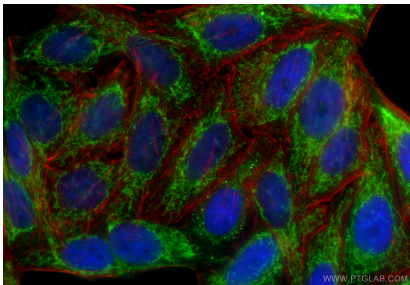
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68480-1-Ig (DIABLO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



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Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Smac/DIABLO antibody (68480-1-Ig, Clone: 2F12C9) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).