## For Research Use Only

## Smac/DIABLO Monoclonal antibody

Catalog Number: 68480-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

68480-1-lg BC011909

Concentration: GeneID (NCBI): 56016

Source: UNIPROT ID: Mouse Q9NR28

Isotype: Full Name:
IgG1 diablo homolog (Drosophila)

Immunogen Catalog Number: Calculated MW:

AG32774 27 kDa

Observed MW: 20 kDa

Applications Tested Applications:

WB, IF/ICC, ELISA
Species Specificity:
human, rat

Positive Controls:

WB: U2OS cells, K-562 cells, LNCaP cells, HeLa cells, HEK-293 cells, Jurkat cells, HSC-T6 cells

**Purification Method:** 

CloneNo.: 2F12C9

Protein G purification

**Recommended Dilutions:** 

WB 1:5000-1:50000

IF/ICC 1:400-1:1600

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:

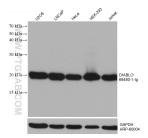
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

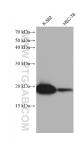
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

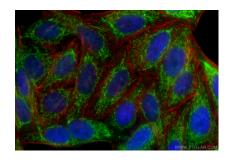
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 68480-1-lg (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-lg, Clone: 2F12C9) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).