

For Research Use Only

# Smac/DIABLO Monoclonal antibody, PBS Only (Detector)

Catalog Number: 68480-1-PBS



## Basic Information

<b>Catalog Number:</b> 68480-1-PBS	<b>GenBank Accession Number:</b> BC011909	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 56616	<b>CloneNo.:</b> 2F12C9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9NR28	
<b>Isotype:</b> IgG1	<b>Full Name:</b> diablo homolog (Drosophila)	
<b>Immunogen Catalog Number:</b> AG32774	<b>Calculated MW:</b> 27 kDa	
	<b>Observed MW:</b> 20 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, rat

## Product Information

68480-1-PBS targets Smac/DIABLO as part of a matched antibody pair:

MP50334-2: 68480-4-PBS capture and 68480-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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)

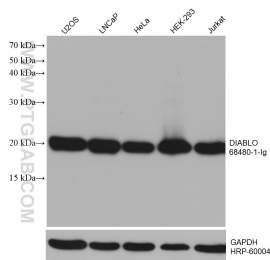
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

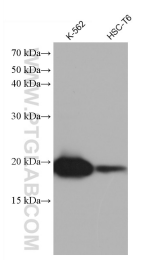
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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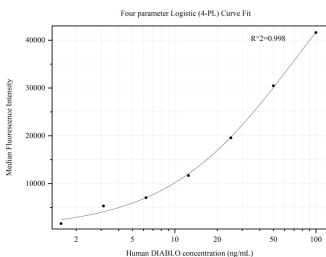
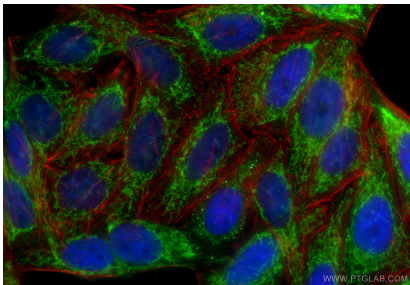
## Selected Validation Data



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. This data was developed using the same antibody clone with 68480-1-PBS in a different storage buffer formulation.



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Cytometric bead array standard curve of MP50334-2, DIABLO Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68480-4-PBS. Detection antibody: 68480-1-PBS. Standard:Ag32774. Range: 1.563-100 ng/mL.