

## Anti-SMAC Antibody (4Z608)

## Product Details

Ig Type:	Mouse IgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	4Z608
Purification:	Protein A

## Applications

Verified Activity:	Anti-Diablo mouse monoclonal antibody at 1:500 dilution. -Lane A: HepG2 Whole Cell Lysate. -Lane B: A431 Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:22 kDa. -Observed band size:20 kDa
Application:	ELISA,WB
Recommended	WB: 1:500-1:2000; ELISA: 1:1000-1:2000

## Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	Recombinant Protein: Human Diablo protein (TMPY-00924)
Antigen Species:	Human
Synonyms:	SMAC;DFNA64;diablo, IAP-binding mitochondrial protein

## Research Background

Apoptosis is an essential processes required for normal development and homeostasis of all metazoan organisms. Second Mitochondria-Derived Activator of Caspases (Smac) or Direct IAP Binding Protein with low isoelectric point, pI (Diablo) is a proapoptogenic mitochondrial protein that is released to the cytosol in response to diverse apoptotic stimuli, including commonly used chemotherapeutic drugs. The current knowledge about structure and function of Smac/Diablo during programmed cell death, both in mitochondrial and receptor pathways are presented. It has been shown that Diablo mainly interacts with IAPs in the cytochrome c/Apaf-1/caspase-9 pathway, and promotes apoptosis. Diablo is released from the mitochondria into the cytosol occurring downstream of cytochrome c release in response to apoptotic stimuli such as irradiation, DNA damage or cytotoxic drugs. In the cytosol, Smac/Diablo interacts and antagonizes inhibitors of apoptosis proteins (IAPs), thus allowing the activation of caspases and

apoptosis. This activity has prompted the synthesis of peptidomimetics that could potentially be used in cancer therapy. The role of Smac/DIABLO in colorectal carcinogenesis is ill defined. Data continues to accumulate to suggest that decreased levels of Smac/DIABLO may be important in chemoradiation-resistance to apoptosis in advanced colon cancer.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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