

Datasheet for ABIN7197843  
**DIABLO Protein (His tag)**



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## Overview

Quantity:	100 µg
Target:	DIABLO
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This DIABLO protein is labelled with His tag.

## Product Details

Purpose:	Recombinant Human SMAC/Diablo Protein (His Tag)(Active)
Sequence:	Ala 56-Asp 239
Characteristics:	A DNA sequence encoding the mitochondrial-located form of human Diablo (NP_063940.1) (Ala 56-Asp 239) was expressed with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its binding ability in a functional ELISA. Immobilized recombinant human SMAC-His at 10 µg/ml (100 µl/well) can bind recombinant human XIAP-AVI with a linear range of 0.125-1.0 µg/ml.

## Target Details

Target:	DIABLO
Alternative Name:	SMAC/Diablo ( <a href="#">DIABLO Products</a> )

## Target Details

Background:	<p>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 knowlege 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.</p> <p>Synonym: DFNA64,SMAC</p>
Molecular Weight:	22 kDa
NCBI Accession:	<a href="#">NP_063940</a>
Pathways:	<a href="#">Apoptosis, Caspase Cascade in Apoptosis, Positive Regulation of Endopeptidase Activity</a>

## Application Details

Restrictions:	For Research Use only
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## Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at &lt; -20°C for 3 months.</p>