9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

37-1010: Human SMAC / Diablo Recombinant Protein (His Tag)(Discontinued)

Reactivity : Human
Alternative Name : DFNA64 Protein, SMAC Protein,

Description

Source : E. coli
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.

Product Info

Amount :	Human SMAC / Diablo Recombinant Protein (His Tag)(Discontinued) / 200 µg
Purification :	> 90 % as determined by SDS-PAGE
Content :	Formulation Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Storage condition :	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Amino Acid :	Ala56-Asp239

Application Note

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.

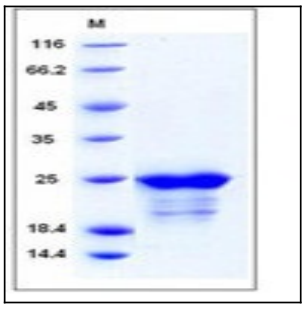

Fig 1: Human SMAC / Diablo Recombinant Protein (His Tag)