9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

SMAC/DIABLO Human

SMAC/DIABLO Human Recombinant
RCP2128

Product Overview

Name	SMAC/DIABLO Human
Description	
SMAC/DIABLO Human Recombinant	
Accession (Primary)	Q9NR28
Synonyms	
Diablo homolog mitochondrial, Second mitochondria-derived activator of caspase, Smac protein, Direct IAP-binding protein with low pI, DIABLO, SMAC, SMAC3, DIABLO-S, FLJ10537, FLJ25049.	
Introduction	
Smac/Diablo is a proapoptotic protein that increases caspase activation in the cytochrome c/Apaf-1/caspase-9 pathway by its binding to the inhibitor of apoptosis proteins (IAPs) and removing their inhibitory activity. Smac/Diablo is a mitochondrial protein which enters the cytosol when cells go through apoptosis, and it moderates the caspase inhibition of IAPs. Smac/DIABLO expression is associated with the result of renal cell carcinoma. Dimeric form of Smac/DIABLO implies that once expressed in the cell the protein has a little probability of dissociation and, thus, loss of function. Survivin, Smac/DIABLO, & PKC-? play an important part in the inhibition of apoptosis by FGF-2 in human small cell lung cancer cells. Mitochondrial survivin associates with Smac/DIABLO, delaying its release. Decreased expression of Smac protein takes part in ovarian carcinogenesis and chemotherapeutic resistance. Smac/DIABLO plays a role in tumor cells during the pathway of apoptosis induction. SMAC protein is regulated by XIAP and degraded by proteasome. SMAC protein takes part inleukemic cell apoptosis. Smac is released during stress-induced apoptosis in multiple myeloma cells.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
The Smac/Diablo solution contains 20mM Tris pH-7.5.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	

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Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

MASMTGGQQM GRGSMAVPIA QKSEPHSLSS EALMRRAVSL VTDSTSTFLS QTTYALIEAI TEYTKAVYTL

TSLYRQYTSL LGKMNSEEED EVWQVIIGAR AEMTSKHQEY LKLETTWMTA VGLSEMAAEA AYQTGADQAS

ITARNHIQLV KLQVEEVHQL SRKAETKLAE AQIEELRQKT QEEGEERAES EQEAYLRED.

Precautions

SMAC/DIABLO Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q9NR28)