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Datasheet for 100-401-244

Smac/Diablo Antibody

Overview

Description:	Anti-Smac/DIABLO (RABBIT) Antibody - 100-401-244
Item No.:	100-401-244
Size:	100 µL
Applications:	WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Apoptosis is a conserved cell suicide program essential for the development and homeostasis of multi-cellular organisms. Abnormal inhibition of apoptosis is a hallmark of cancer and autoimmune diseases, whereas excessive cell death is found in neurodegenerative disorders such as Alzheimers disease. Executioners of the apoptotic program are cysteine proteases termed caspases that exist as inactive zymogens in living cells and are activated during apoptosis. Active caspases cleave key intracellular protein substrates, resulting in the characteristic morphological changes associated with apoptosis. The release of cytochrome c from the mitochondria triggers the oligomerization of Apaf-1 in an ATP/dATP-dependent manner and induces the autoactivation of caspase-9. Active caspase-9 in turn activates downstream effector caspases including caspase -3, -6 and -7.
Synonyms:	rabbit anti-smac antibody, rabbit anti-Diablo antibody, Diablo homolog mitochondrial, Second mitochondria-derived activator of caspase, Smac protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	DIABLO
Reactivity:	Human
Immunogen Type:	Recombinant Protein

Immunogen:	This whole rabbit serum was prepared by repeated immunizations with recombinant His6-tagged human Smac/DIABLO protein (amino acids 56-239).
Purity/Specificity:	This antiserum is directed against human Smac/DIABLO and is useful in determining its presence in various assays.
Relevant Links:	• UniProtKB - Q9NR28 • NCBI - Q9NR28.1 • GeneID - 56616

Application Details

Tested Applications:	WB
Application Note:	This antibody was tested by immunoblot and reacts with human Smac/DIABLO protein. Lysates from human HeLa and LNCaP cells are positive for Smac/DIABLO. Other animal tissues have not been tested.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IP:	1:100
WB:	1:1,000 - 1:2,000

Formulation

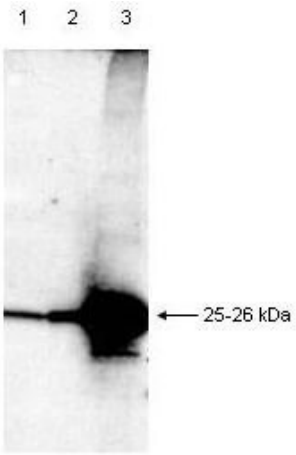
Physical State:	Liquid (sterile filtered)
Concentration:	85 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

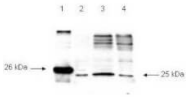
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot
Anti-Smac is shown to detect a 25-26 kDa band in partially purified recombinant human Smac protein by western blot. Lanes 1-3 are loaded with 1, 10 and 100 ng of protein per lane, respectively. The blot was incubated overnight with a 1:1000 dilution of anti-Smac in TBST. Detection occurs using a 1:1000 dilution of HRP Goat-a-Rabbit with visualization via ECL. Film exposure approximately 1'. Other detection systems will yield similar results.



Western Blot
Western blot using anti-Smac detects a 26 kDa band when 1 µg of recombinant Smac is applied (lane 1). Lane 2 shows Smac detection when 30 µg of 1% NP-40 treated cell lysate from HeLa cells is applied. Lanes 3 & 4 show 30 µg each of cytosolic fractions from HeLa cell lysates both with (lane 3) and without (lane 4) treatment with 30 µM etoposide. Recombinant Smac migrates slower than the native form because of the His6-tag. The blot was incubated overnight with a 1:1000 dilution of anti-Smac in TBST. Detection occurs using a 1:1000 dilution of HRP Goat-a-Rabbit with visualization via ECL. Film exposure approximately 1'

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.