Caspase-3 polyclonal antibody

The caspases are a family of cysteine proteases that cleave after certain aspartate residues, and are primarily recognized as mediators of apoptosis. caspases are synthesized as inactive zymogens that can be cleaved to form active enzymes following the induction of apoptosis by stress or death receptors. Initiator caspases (e.g. caspase-8 and -10) are activated by dimerization of the zymogen on a dedicated adaptor protein. These activated initiator caspases in-turn cleave downstream effector or executioner caspases (e.g. caspase-3, -6, and -7) in a cascade-like manner, which cleave key cellular proteins that lead to the morphological changes associated with apoptotic cell death.

This antibody is covered by our Worry-Free Guarantee.

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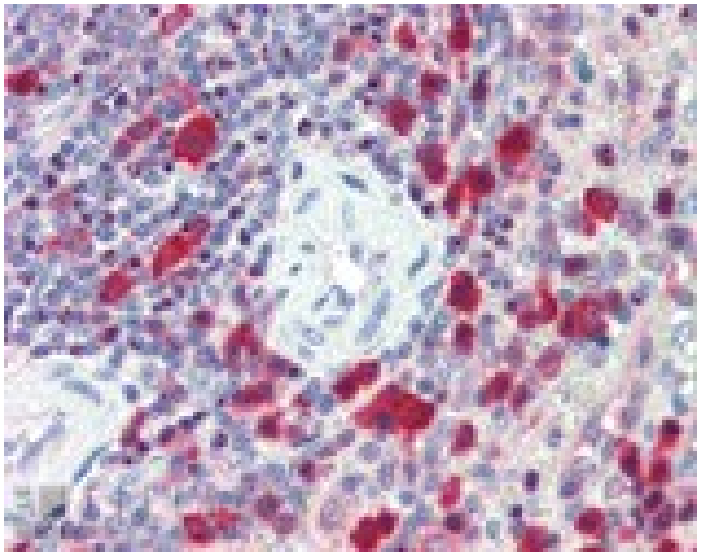
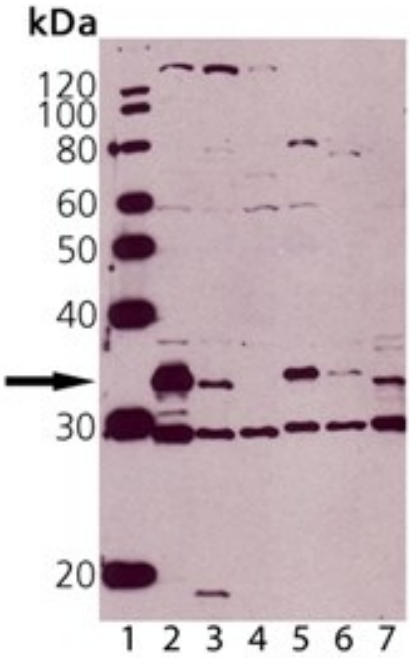
ADI-AAP-113-D	50µg
ADI-AAP-113-F	200µg

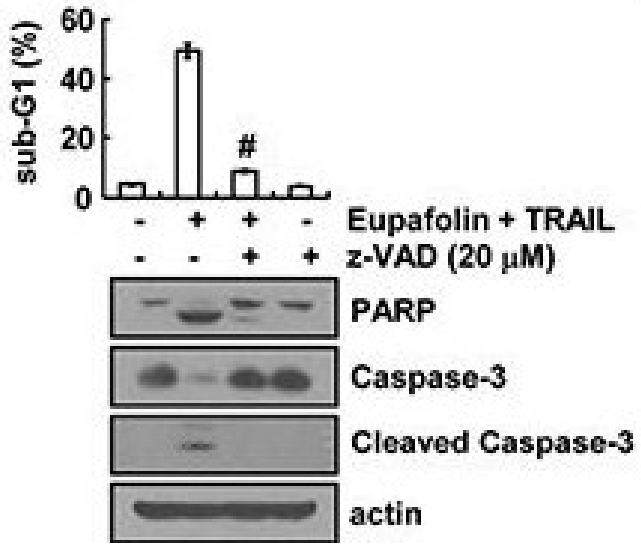
Manuals, SDS & CofA View Online »



Immunohistochemistry analysis of human spleen tissue stained with Caspase-3, pAb at 10µg/ml.



Western blot analysis of Caspase-3 pAb: Lane 1: MW Marker, Lane 2: Jurkat (Prod. No. ADI-LYC-JK100), Lane 3: Jurkat treated with staurosporine, Lane 4: MCF-7 (negative control), Lane 5: HeLa, (cell lysate) (Prod. No. ADI-LYC-HL100), Lane 6: Rat Spleen, Lane 7: Mouse Spleen.



Eupafolin sensitizes TRAIL-induced apoptosis in Caki cellsA-C. Caki cells were treated with 50 ng/ml TRAIL in the presence or absence of the indicated concentrations with eupafolin for 24 h (A) or indicated time periods (B and C). Apoptosis was analyzed as a sub-G1 population by flow cytometer. The protein levels of PARP and actin were determined by Western blotting. The level of actin was used as a loading control. D-F. Caki cells were treated with 50 ng/ml TRAIL in the presence or absence of 30 μM eupafolin for 24 h. Cell morphology was detected by interference light microscopy (D). The condensation and fragmentation of the nuclei were detected by 4′, 6′-diamidino-2-phenylindole staining (E). The DNA fragmentation detection kit determined the fragmented DNA (F). G. Isoboles were obtained by plotting the combined concentrations of each drug required to produce 50% cell death. The straight line connecting the IC50 values obtained for the two agents when applied alone corresponded to the addition of their independent effects. Values below this line indicate synergy, whereas values above this line indicate antagonism. H. Caki cells were treated with 50 ng/ml TRAIL in the presence or absence of 30 μM eupafolin for 24 h. Caspase activities were determined with colorimetric assays using caspase-3 DEVDase assay kits. I. Caki cells were treated with 30 μM eupafolin plus 50 ng/ml TRAIL for 24 h in the presence or absence of 20 μM z-VAD-fmk (z-VAD). The sub-G1 fraction was measured by flow cytometry. The protein expression levels of PARP, caspase-3, cleaved caspase-3 and actin were determined by Western blotting. The level of actin was used as a loading control. J. Caki cells were treated with 30 μM eupafolin for the indicated time periods and loaded with a rhodamine123 fluorescent dye. The mitochondrial membrane potential (MMP) was measured using a flow cytometer. K. Caki cells were treated with 50 ng/ml TRAIL in the presence or the

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	IHC (PS), WB
Application Notes	Detects a band of ~36kDa by Western blot. A lower molecular weight band refers to a proteolytic cleavage product of caspase-3.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
GenBank ID	U26943
Host	Rabbit
Immunogen	Recombinant human Caspase-3 protein (full length).
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:1,000, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from rabbit serum.
Species Reactivity	Bovine, Chicken, Dog, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Yeast
UniProt ID	P42574
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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