

Active Caspase-3 Rabbit mAb

Catalog No: #48667

Package Size: #48667-1 50ul #48667-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

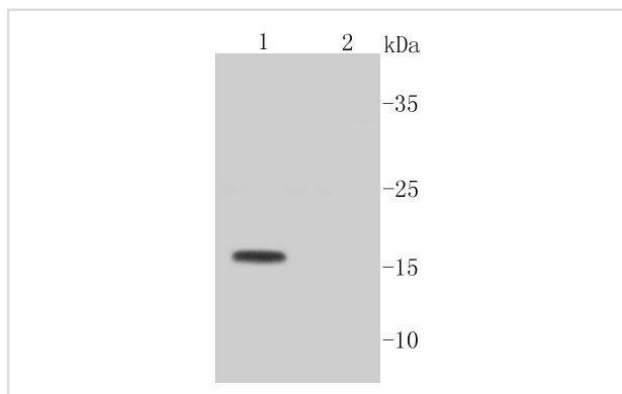
Description

Product Name	Active Caspase-3 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SR01-02
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	Apopain antibody CASP 3 antibody CASP-3 antibody CASP3 antibody CASP3_HUMAN antibody Caspase 3 antibody Caspase-3 subunit p12 antibody CPP 32 antibody CPP-32 antibody CPP32B antibody Cysteine protease CPP32 antibody PARP cleavage protease antibody Protein Yama antibody SCA-1 antibody SCA1 antibody SREBP cleavage activity 1 antibody Yama antibody
Accession No.	Swiss-Prot#:P42574
Uniprot	P42574
GeneID	836;
Calculated MW	17 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

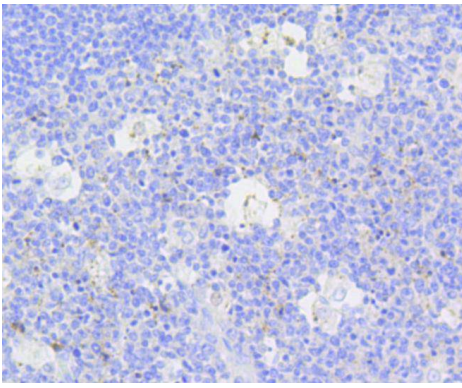
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200

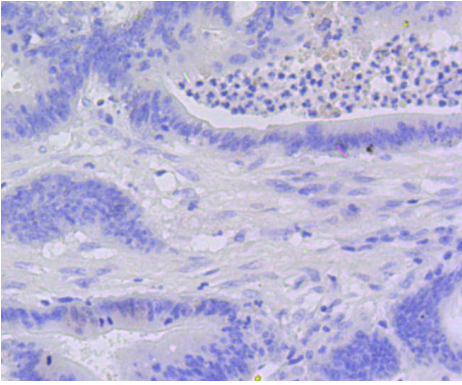
Images



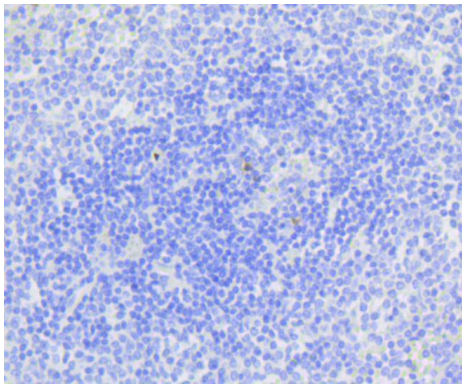
Western blot analysis of active Caspase-3 on different cell lysates using anti-active Caspase-3 antibody at 1/1,000 dilution. Positive control:
 Lane 1: Camptothecin (2 μ M) treated Jurkat cells
 Lane 2: Untreated Jurkat cells



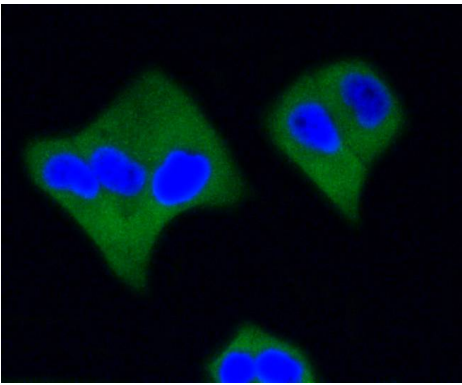
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-active Caspase-3 antibody. Counter stained with hematoxylin.



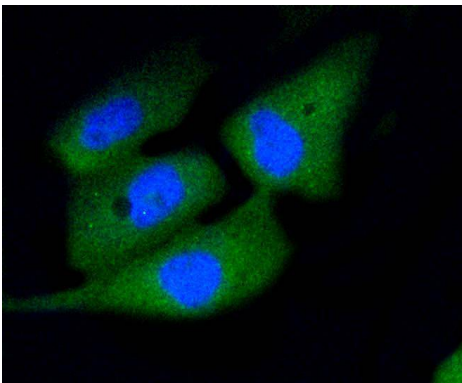
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-active Caspase-3 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-active Caspase-3 antibody. Counter stained with hematoxylin.



ICC staining active Caspase-3 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining active Caspase-3 in PC-3M cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Caspase-3, also known as apopain, SCA-1, Yama and CPP32, is an aspartate-specific cysteine protease that belongs to the ICE subfamily of caspases. Caspase-3 is expressed in cells as an inactive precursor from which the p17 and p11 subunits of the mature caspase-3 are proteolytically generated during apoptosis. The caspase-3 precursor is first cleaved at Asp175-Ser176 to produce the p11 subunit and the p20 peptide. Subsequently, the p20 peptide is cleaved at Asp28-Ser29 to generate the mature p17 subunit. The active caspase-3 enzyme is a heterodimer composed of two p17 and two p11 subunits. At the onset of apoptosis, caspase-3 proteolytically cleaves PARP at an Asp216-Gly217 bond. During the execution of the apoptotic cascade, activated caspase-3 releases SREBP from the membrane of the ER in a proteolytic reaction that is distinct from their normal sterol-dependent activation. Caspase-3 cleaves and activates SREBPs between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Caspase-3 also cleaves and activates caspase-6, -7 and -9. The human caspase-3 gene encodes a cytoplasmic protein that is highly expressed in lung, spleen, heart, liver, kidney and cells of the immune system.

References

Note: This product is for in vitro research use only