Caspase-3 Rabbit mAb

Catalog No: #48658

Package Size: #48658-1 50ul #48658-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

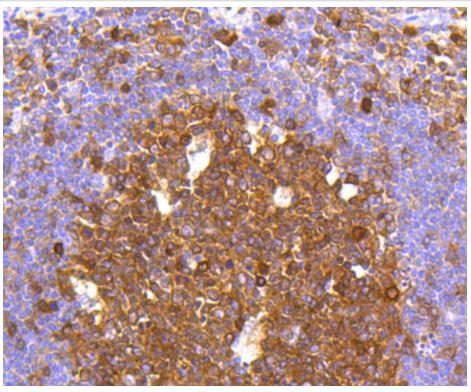
Description

Product Name	Caspase-3 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SR03-01
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Human;Mouse
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	A830040C14Rik antibody Apopain antibody CASP-3 antibody CASP3 antibody CASP3_HUMAN antibody Casp3a antibody Caspase 3 antibody Caspase 3, apoptosis-related cysteine peptidase antibody Caspase 3, apoptosis-related cysteine protease antibody Caspase 3, apoptosis-related cysteine protease a antibody Caspase-3 subunit p12 antibody CC3 antibody CPP-32 antibody CPP32 antibody CPP32B antibody Cysteine protease CPP32 antibody EC 3.4.22.56 antibody LICE antibody mldy antibody OTTHUMP00000165052 antibody OTTHUMP00000165053 antibody OTTHUMP00000165054 antibody PARP cleavage protease antibody Procaspase3 antibody Protein Yama antibody SCA 1 antibody SCA-1 antibody SREBP cleavage activity 1 antibody Yama antibody
Accession No.	Swiss-Prot#:P42574
Calculated MW	32 kDa
SDS-PAGE MW	35 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

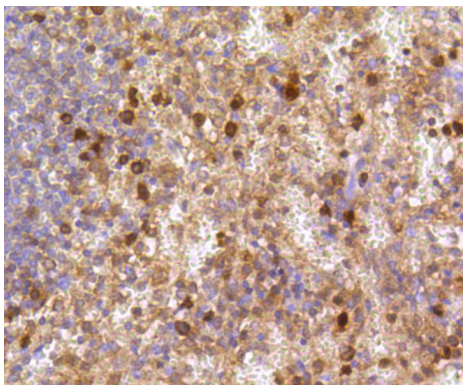
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200 ICC: 1:50-1:100FC:1:20-1:50

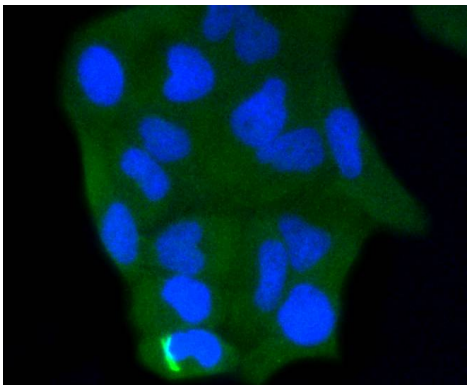
Images



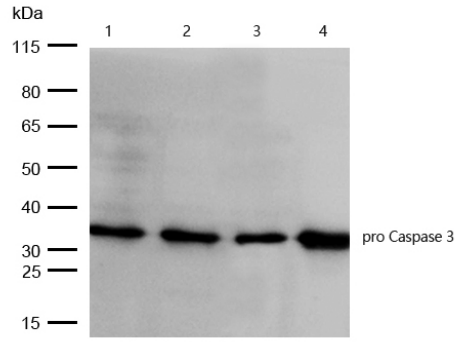
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Caspase-3 antibody. Counter stained with hematoxylin.



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



ICC staining 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.



All lanes: pro Caspase 3 Rabbit mAb at 1/1k dilution

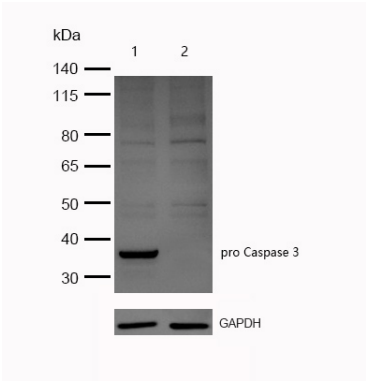
Lane 1 : Hela whole cell lysates
Lane 2 : JK whole cell lysatesLane 3 : MCF7 whole cell lysatesLane 4 : SH-SY5Y whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

Predicted band size: 32 kDa
Observed band size: 35 kDa

Exposure time: 9 seconds



All lanes: pro Caspase 3 Rabbit mAb at 1/1k dilution

Lane 1 : Wild-type HAP1 cell lysate
Lane 2 : pro Caspase 3 knockdown Hela cell lysate

Lysates/proteins at 20 µg per lane.

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

1. Li H et al. Protective effect of ginsenoside Rg1 on lidocaine-induced apoptosis. Mol Med Rep 9:395-400 (2014). 2. Cejkova J et al. Suppression of alkali-induced oxidative injury in the cornea by mesenchymal stem cells growing on nanofiber scaffolds and transferred onto the damaged corneal surface. Exp Eye Res 116:312-23 (2013).

Published Papers

el at., Potential role of the cAMP/PKA/CREB signallIng pathway In hypoxic preconditionIng and effect on propofol?Induced neurotoxicity In the hippocampus of neonatal rats.In Mol Med Rep on 2019 Aug by Guan R, Lv J, et al..PMID:31257533, , (2019)

PMID:31257533

Note: This product is for in vitro research use only and is not intended for use in humans or animals.