pro Caspase 3 Rabbit mAb

Catalog No: #48686

Package Size: #48686-1 50ul #48686-2 100ul

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

Description

Product Name	pro Caspase 3 Rabbit mAb
Clonality	Monoclonal
Clone No.	SZ02-08
Purification	Affinity-chromatography
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms
Immunogen Description	A synthesized peptide derived from human Caspase 3
Conjugates	Unconjugated
Other Names	CASP3 antibody Caspase 3 antibody Caspase 3 apoptosis related cysteine peptidase antibody CPP32 antibody CPP32B antibody Procaspase 3 antibody SCA 1 antibody SCA1 antibody Yama antibody Yama protein antibody
Accession No.	Swiss-Prot#:P42574
Calculated MW	35 kDa
Concentration	1.1mg/ml
Formulation	Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at +4°C for short term. Store at -20°C for long term. Avoid freeze/thaw cycle.

Application Details

WB 1:1000-1:2000

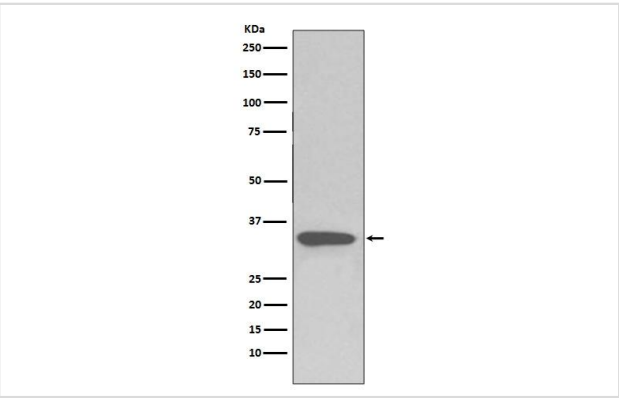
IHC 1:100-1:200

ICC/IF 1:50-1:200

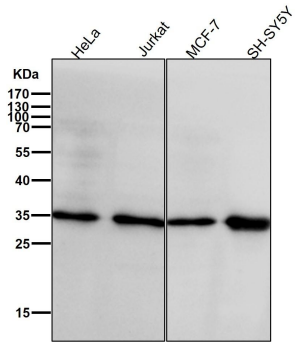
IP 1:20-1:50

FC 1:20-1:100

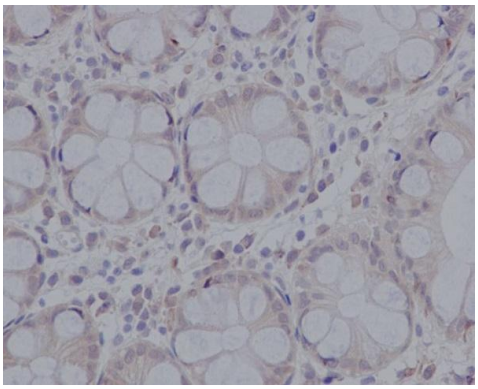
Images



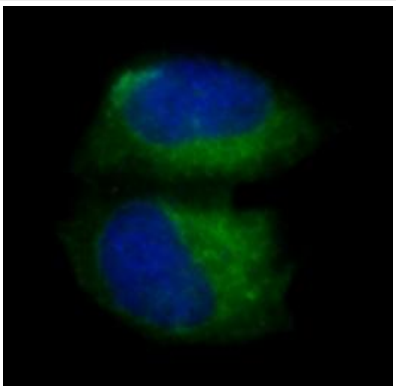
Western blot analysis of pro Caspase 3 expression in Jurkat cell lysate.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded human colon, using pro Caspase 3 Antibody.



Immunofluorescent analysis of Hela cells, using pro Caspase 3 Antibody.

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.

Published Papers

el at., Neuronal SH2B1 attenuates apoptosis in an MPTP mouse model of Parkinson's disease via promoting PLIN4 degradation. In Redox Biol on 2022 Jun by Xiaojuan Han, Yuan Liu, et al..PMID: 35390677, , (2022)

PMID:35390677

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