

Mouse active Caspase 3 Monoclonal Antibody | anti-CASP3 antibody

Anti-active Caspase 3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA293377	Mouse	Human, Mouse, Rat	Immunohistochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

active Caspase 3; Monoclonal Antibody; Anti-active Caspase 3 Antibody; CPP32; Caspase-3; CASP-3; Apopain; Cysteine protease CPP32; CPP-32; Protein Yama; SREBP cleavage activity 1; SCA-1; anti-CASP3 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Specificity	Recognizes endogenous levels of active Caspase 3 protein.
Form/Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Applicable Applications for anti-CASP3 antibody	IHC (Immunohistochemistry), IC (Immunochemistry), IF (Immunofluorescence), WB (Western Blot)
Cellular Location	Cytoplasm
Tissue Location	Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



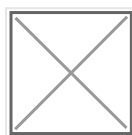
IF (Immunofluorescence)

Dilution: WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/50 - 1/200)



IHC (Immunohistochemistry)

Dilution: WB: (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/50 - 1/200) Immunohistochemical analysis of active Caspase 3 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



WB (Western Blot)

Dilution: WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/50 - 1/200) Western blot analysis of active Caspase 3 expression in Hela (A), NIH3T3 (B), rat brain (C) whole cell lysates.

ADDITIONAL INFORMATION

Related Product Information for anti-CASP3 antibody	Mouse monoclonal antibody to active Caspase 3 Recombinant protein corresponding to human active Caspase 3. Involved in the activation cascade of caspases responsible for apoptosis execution (PubMed:7596430). At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216- Asp-[Gly-217' bond (PubMed:7774019). Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix- loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9 (PubMed:7596430). Involved in the cleavage of huntingtin (PubMed:8696339). Triggers cell adhesion in sympathetic neurons through RET cleavage (PubMed:21357690). Cleaves and inhibits serine/threonine-protein kinase AKT1 in response to oxidative stress (PubMed:23152800). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:23845944, PubMed:33725486).
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	14790119
NCBI GeneID	836
NCBI Accession #	NP_004337.2
NCBI GenBank Nucleotide #	NM_004346.3
UniProt Accession #	P42574; Q96AN1; Q96KP2; A8K5M2; D3DP53
Molecular Weight	31,608 Da
NCBI Official Full Name	caspase-3 preproprotein
NCBI Official Synonym Full Names	caspase 3, apoptosis-related cysteine peptidase
NCBI Official Symbol	CASP3
NCBI Official Synonym Symbols	CPP32; SCA-1; CPP32B
NCBI Protein Information	caspase-3; CASP-3; CPP-32; apopain; procaspase3; protein Yama; PARP cleavage protease; cysteine protease CPP32; SREBP cleavage activity 1; caspase 3, apoptosis-related cysteine protease
UniProt Protein Name	Caspase-3
UniProt Gene Name	CASP3
UniProt Synonym Gene Names	CPP32; CASP-3; CPP-32; SCA-1
UniProt Entry Name	CASP3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.