

Anti-Caspase 3 (pS150) Antibody

Rabbit polyclonal antibody to Caspase 3 (pS150)

Catalog # AP60546

Product Information

Application	WB, IHC
Primary Accession	P42574
Other Accession	P70677
Reactivity	Human, Mouse, Rat, Rabbit, Monkey, Bovine, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31608

Additional Information

Gene ID	836
Other Names	CPP32; Caspase-3; CASP-3; Apopain; Cysteine protease CPP32; CPP-32; Protein Yama; SREBP cleavage activity 1; SCA-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Caspase 3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

Name	CASP3
Synonyms	CPP32 {ECO:0000303 PubMed:7983002}
Function	Thiol protease that acts as a major effector caspase involved in the execution phase of apoptosis (PubMed: 18723680 , PubMed: 20566630 , PubMed: 23650375 , PubMed: 35338844 , PubMed: 35446120 , PubMed: 7596430). Following cleavage and activation by initiator caspases (CASP8, CASP9 and/or CASP10), mediates execution of apoptosis by catalyzing cleavage of many proteins (PubMed: 18723680 , PubMed: 20566630 , PubMed: 23650375 , PubMed: 7596430). At the onset of apoptosis, it proteolytically cleaves poly(ADP-ribose) polymerase PARP1 at a '216-Asp- -Gly-217' bond (PubMed: 10497198 , PubMed: 16374543 , PubMed: 7596430 , 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 (By similarity). Cleaves and activates caspase-6, -7 and -9 (CASP6, CASP7 and CASP9, respectively) (PubMed:[7596430](#)). Cleaves and inactivates interleukin-18 (IL18) (PubMed:[37993714](#), PubMed:[9334240](#)). Involved in the cleavage of huntingtin (PubMed:[8696339](#)). Triggers cell adhesion in sympathetic neurons through RET cleavage (PubMed:[21357690](#)). Cleaves DSG2 in response to apoptosis resulting in a loss of full length DSG2 at desmosome cell junctions and subsequent loss of cell-cell adhesion (PubMed:[17559062](#)). Also cleaves JUP in response to apoptosis (PubMed:[17559062](#)). Cleaves and inhibits serine/threonine-protein kinase AKT1 in response to oxidative stress (PubMed:[23152800](#)). Acts as an inhibitor of type I interferon production during virus-induced apoptosis by mediating cleavage of antiviral proteins CGAS, IRF3 and MAVS, thereby preventing cytokine overproduction (PubMed:[30878284](#)). Also involved in pyroptosis by mediating cleavage and activation of gasdermin-E (GSDME) (PubMed:[35338844](#), PubMed:[35446120](#)). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:[23845944](#), PubMed:[33725486](#)). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (PubMed:[36758104](#), PubMed:[36758106](#)).

Cellular Location

Cytoplasm.

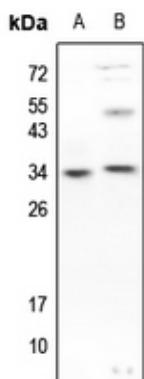
Tissue Location

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.

Background

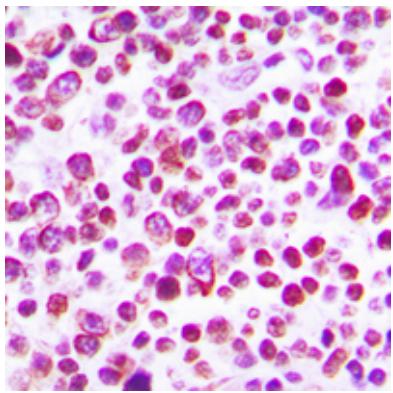
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Caspase 3. The exact sequence is proprietary.

Images



Western blot analysis of Caspase 3 (pS150) expression in A549 (A), LO2 (B) whole cell lysates.

Immunohistochemical analysis of Caspase 3 (pS150) 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.



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