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Casp3 Antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI14598

Product Information

Application	WB
Primary Accession	P70677
Other Accession	NM_009810, NP_033940
Reactivity	Human, Rat, Pig, Goat, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Rat, Pig, Goat, Dog, Guinea Pig, Horse, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31475

Additional Information

Gene ID	12367
Alias Symbol	A830040C14Rik, AC-3, Apopain, CC3, CPP32, Caspase-3, Lice, Yama, mldy
Other Names	Caspase-3, CASP-3, 3.4.22.56, Apopain, Cysteine protease CPP32, CPP-32, LICE, Protein Yama, SREBP cleavage activity 1, SCA-1, Caspase-3 subunit p17, Caspase-3 subunit p12, Casp3, Cpp32
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Casp3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Casp3 Antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Casp3
Synonyms	Cpp32 {ECO:0000303|PubMed:8934524}
Function	Thiol protease that acts as a major effector caspase involved in the execution phase of apoptosis (PubMed:16469926, PubMed:8934524). Following cleavage and activation by initiator caspases (CASP8, CASP9 and/or CASP10), mediates execution of apoptosis by catalyzing cleavage of many proteins (PubMed:16469926, PubMed:8934524). At the onset of apoptosis, it proteolytically cleaves poly(ADP-ribose) polymerase PARP1 at a '216-Asp-|-Gly-217' bond. 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 (CASP6, CASP7 and CASP9, respectively). Cleaves and inactivates interleukin-18 (IL18) (By similarity). Triggers cell adhesion in sympathetic neurons through RET cleavage (By similarity). Also involved in axon pruning during brain development (PubMed:24478350). 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 (By similarity). Also cleaves JUP in response to apoptosis (By similarity). Cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes (By similarity). Cleaves and inhibits serine/threonine-protein kinase AKT1 in response to oxidative stress (PubMed:12124386). 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) (By similarity). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:25231987, PubMed:33725486). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (By similarity).

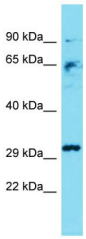
Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P42574}.

Tissue Location Highest expression in spleen, lung, liver, kidney and heart (PubMed:9038361). Lower expression in brain, skeletal muscle and testis (PubMed:9038361).

References

Juan T.S.-C.,et al.Oncogene 13:749-755(1996).
Mukasa T.,et al.Biochem. Biophys. Res. Commun. 231:770-774(1997).
van de Craen M.,et al.FEBS Lett. 403:61-69(1997).
Fernandes-Alnemri T.,et al.Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
Denis F.,et al.Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases.

Images



Host: Rabbit
Target Name: Casp3
Sample Tissue: Mouse Liver lysates
Antibody Dilution: 1.0µg/ml

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.