

mouse CASP3 Antibody (N-term S12) Blocking Peptide
Synthetic peptide
Catalog # BP18708a**Specification**

mouse CASP3 Antibody (N-term S12) Blocking Peptide - Product InformationPrimary Accession [P70677](#)**mouse CASP3 Antibody (N-term S12) Blocking Peptide - Additional Information****Gene ID** 12367**Other Names**

Caspase-3, CASP-3, 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

mouse CASP3 Antibody (N-term S12) Blocking Peptide - 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:8934524, PubMed:16469926). Following cleavage and activation by initiator caspases (CASP8, CASP9 and/or CASP10), mediates execution of apoptosis by catalyzing cleavage of many proteins (PubMed:8934524, PubMed:16469926). 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). 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:<a

[12124386](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25231987), PubMed:[33725486](http://www.uniprot.org/citations/33725486)).

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).

mouse CASP3 Antibody (N-term S12) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

mouse CASP3 Antibody (N-term S12) Blocking Peptide - Images

mouse CASP3 Antibody (N-term S12) Blocking Peptide - Background

CASP3 is involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) 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 (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.

mouse CASP3 Antibody (N-term S12) Blocking Peptide - References

Srikanth, C.V., et al. Science 330(6002):390-393(2010) Li, F., et al. Cell Stem Cell 7(4):508-520(2010) Wang, L., et al. J. Neurosci. 30(39):13201-13210(2010) Gascon, E., et al. J. Neurosci. 30(37):12414-12423(2010) Bohsali, A., et al. BMC Microbiol. 10, 237 (2010) :