

Phospho-mouse CASP3(S12) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3778b**Specification**

Phospho-mouse CASP3(S12) Antibody Blocking peptide - Product InformationPrimary Accession [P70677](#)**Phospho-mouse CASP3(S12) Antibody 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.

Phospho-mouse CASP3(S12) Antibody 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).

Phospho-mouse CASP3(S12) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-mouse CASP3(S12) Antibody Blocking peptide - Images

Phospho-mouse CASP3(S12) Antibody Blocking peptide - Background

This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta4A precursor protein, which is associated with neuronal death in Alzheimer's disease. Alternative splicing of this gene results in two transcript variants that encode the same protein. [provided by RefSeq].

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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) :