

CASP6 Antibody (S257) Blocking Peptide
Synthetic peptide
Catalog # BP1313d**Specification**

CASP6 Antibody (S257) Blocking Peptide - Product InformationPrimary Accession [P55212](#)**CASP6 Antibody (S257) Blocking Peptide - Additional Information**

Gene ID 839

Other Names

Caspase-6, CASP-6, Apoptotic protease Mch-2, Caspase-6 subunit p18, Caspase-6 subunit p11, CASP6, MCH2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1313d](/products/AP1313d) was selected from the S257 region of human CASP6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CASP6 Antibody (S257) Blocking Peptide - Protein InformationName CASP6 ([HGNC:1507](#))**Function**

Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed: [8663580](http://www.uniprot.org/citations/8663580), PubMed: [19133298](http://www.uniprot.org/citations/19133298), PubMed: [22858542](http://www.uniprot.org/citations/22858542), PubMed: [27032039](http://www.uniprot.org/citations/27032039), PubMed: [28864531](http://www.uniprot.org/citations/28864531), PubMed: [30420425](http://www.uniprot.org/citations/30420425), PubMed: [32298652](http://www.uniprot.org/citations/32298652)). Acts as a non- canonical executioner caspase during apoptosis: localizes in the nucleus and cleaves the nuclear structural protein NUMA1 and lamin A/LMNA thereby inducing nuclear shrinkage and fragmentation (PubMed: <a

[8663580](http://www.uniprot.org/citations/8663580), PubMed:9463409, PubMed:11953316, PubMed:17401638>). Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (PubMed:11953316>). Acts as a regulator of liver damage by promoting hepatocyte apoptosis: in absence of phosphorylation by AMP-activated protein kinase (AMPK), catalyzes cleavage of BID, leading to cytochrome c release, thereby participating in nonalcoholic steatohepatitis (PubMed:32029622>). Cleaves PARK7/DJ-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1 (PubMed:22858542>). Furthermore, cleaves many transcription factors such as NF-kappa-B and cAMP response element-binding protein/CREBBP (PubMed:10559921>, PubMed:14657026>). Cleaves phospholipid scramblase proteins XKR4 and XKR9 (By similarity). In addition to apoptosis, involved in different forms of programmed cell death (PubMed:32298652>). Plays an essential role in defense against viruses by acting as a central mediator of the ZBP1-mediated pyroptosis, apoptosis, and necroptosis (PANoptosis), independently of its cysteine protease activity (PubMed:32298652>). PANoptosis is a unique inflammatory programmed cell death, which provides a molecular scaffold that allows the interactions and activation of machinery required for inflammasome/pyroptosis, apoptosis and necroptosis (PubMed:32298652>). Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death (PubMed:32298652>). Plays an essential role in axon degeneration during axon pruning which is the remodeling of axons during neurogenesis but not apoptosis (By similarity). Regulates B-cell programs both during early development and after antigen stimulation (By similarity).

Cellular Location

Cytoplasm. Nucleus

CASP6 Antibody (S257) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CASP6 Antibody (S257) Blocking Peptide - Images

CASP6 Antibody (S257) Blocking Peptide - Background

CASP6 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 2 subunits, large and small, that dimerize to form the active enzyme. This protein could be processed by caspases 7, 8 and 10, and is thought to function as a downstream enzyme in the caspase activation cascade.

CASP6 Antibody (S257) Blocking Peptide - References

Schmeck, B., et al., Infect. Immun. 72(9):4940-4947 (2004).Mendez, E., et al., J. Virol.

78(16):8601-8608 (2004).MacLachlan, T.K., et al., Proc. Natl. Acad. Sci. U.S.A. 99(14):9492-9497 (2002).Sordet, O., et al., Leukemia 16(8):1569-1570 (2002).LeBlanc, A., et al., J. Biol. Chem. 274(33):23426-23436 (1999).