

Caspase-6 Antibody
Rabbit mAb
Catalog # AP93197**Specification**

Caspase-6 Antibody - Product Information

Application	WB, IHC
Primary Accession	P55212
Reactivity	Rat
Clonality	Monoclonal

Other Names

Apoptotic protease Mch-2; CASP-6; CASP6; Caspase 6; Caspase 6 apoptosis related cysteine protease; Caspase 6, apoptosis related cysteine peptidase; Caspase-6; Caspase-6 subunit p11; Mch2;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33310 Da

Caspase-6 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Caspase-6
Description	Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves poly(ADP-ribose) polymerase in vitro, as well as lamins. Overexpression promotes programmed cell death.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Caspase-6 Antibody - Protein Information

Name CASP6 ([HGNC:1507](#))

Function

Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed: [19133298](http://www.uniprot.org/citations/19133298) target="_blank">19133298, PubMed: [22858542](http://www.uniprot.org/citations/22858542) target="_blank">22858542, PubMed: [27032039](http://www.uniprot.org/citations/27032039) target="_blank">27032039, PubMed: [28864531](http://www.uniprot.org/citations/28864531) target="_blank">28864531, PubMed: [30420425](http://www.uniprot.org/citations/30420425) target="_blank">30420425, PubMed: [32298652](http://www.uniprot.org/citations/32298652) target="_blank">32298652, PubMed: [8663580](http://www.uniprot.org/citations/8663580) target="_blank">8663580)

target="_blank">8663580). 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:11953316, PubMed:17401638, PubMed:8663580, PubMed:9463409). 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

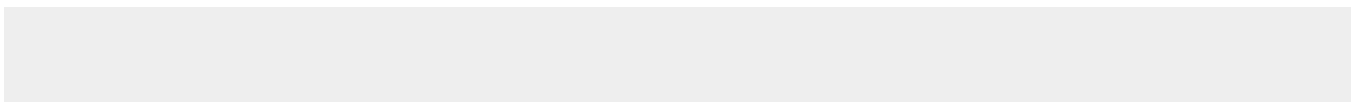
Cytoplasm. Nucleus

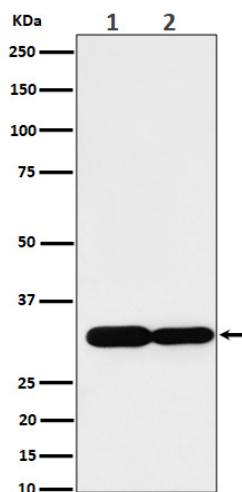
Caspase-6 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Caspase-6 Antibody - Images





Western blot analysis of Caspase-6 expression in (1) Mouse spleen lysate; (2) Rat kidney cell lysate.