

Caspase 6 p18 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51046

Specification

Caspase 6 p18 Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P55212
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28, 35 KDa

Caspase 6 p18 Antibody - 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

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Caspase 6 p18 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). 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](http://www.uniprot.org/citations/11953316) target="_blank">11953316, PubMed: [17401638](http://www.uniprot.org/citations/17401638) target="_blank">17401638, PubMed: [8663580](http://www.uniprot.org/citations/8663580) target="_blank">8663580, PubMed: [9463409](http://www.uniprot.org/citations/9463409) target="_blank">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 p18 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 p18 Antibody - Images

Caspase 6 p18 Antibody - Background

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.

Caspase 6 p18 Antibody - References

Fernandes-Alnemri T.,et al.Cancer Res. 55:2737-2742(1995).
Srinivasula S.M.,et al.J. Biol. Chem. 271:27099-27106(1996).

Bartke T.,et al.Mol. Cell 14:801-811(2004).
Suzuki A.,et al.Oncogene 23:7067-7075(2004).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).