

Caspase-6 Polyclonal Antibody
Catalog # AP68841**Specification****Caspase-6 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P55212
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Caspase-6 Polyclonal Antibody - Additional Information

Gene ID 839

Other Names

CASP6; MCH2; Caspase-6; CASP-6; Apoptotic protease Mch-2

Dilution

WB~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Caspase-6 Polyclonal Antibody - Protein InformationName 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/32029622)). Cleaves PARK7/DJ-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1 (PubMed:[22858542](http://www.uniprot.org/citations/22858542)). Furthermore, cleaves many transcription factors such as NF-kappa-B and cAMP response element-binding protein/CREBBP (PubMed:[10559921](http://www.uniprot.org/citations/10559921)), PubMed:[14657026](http://www.uniprot.org/citations/14657026) target=[14657026](http://www.uniprot.org/citations/14657026)). Cleaves phospholipid scramblase proteins XKR4 and XKR9 (By similarity). In addition to apoptosis, involved in different forms of programmed cell death (PubMed:[32298652](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/32298652)). Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death (PubMed:[32298652](http://www.uniprot.org/citations/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

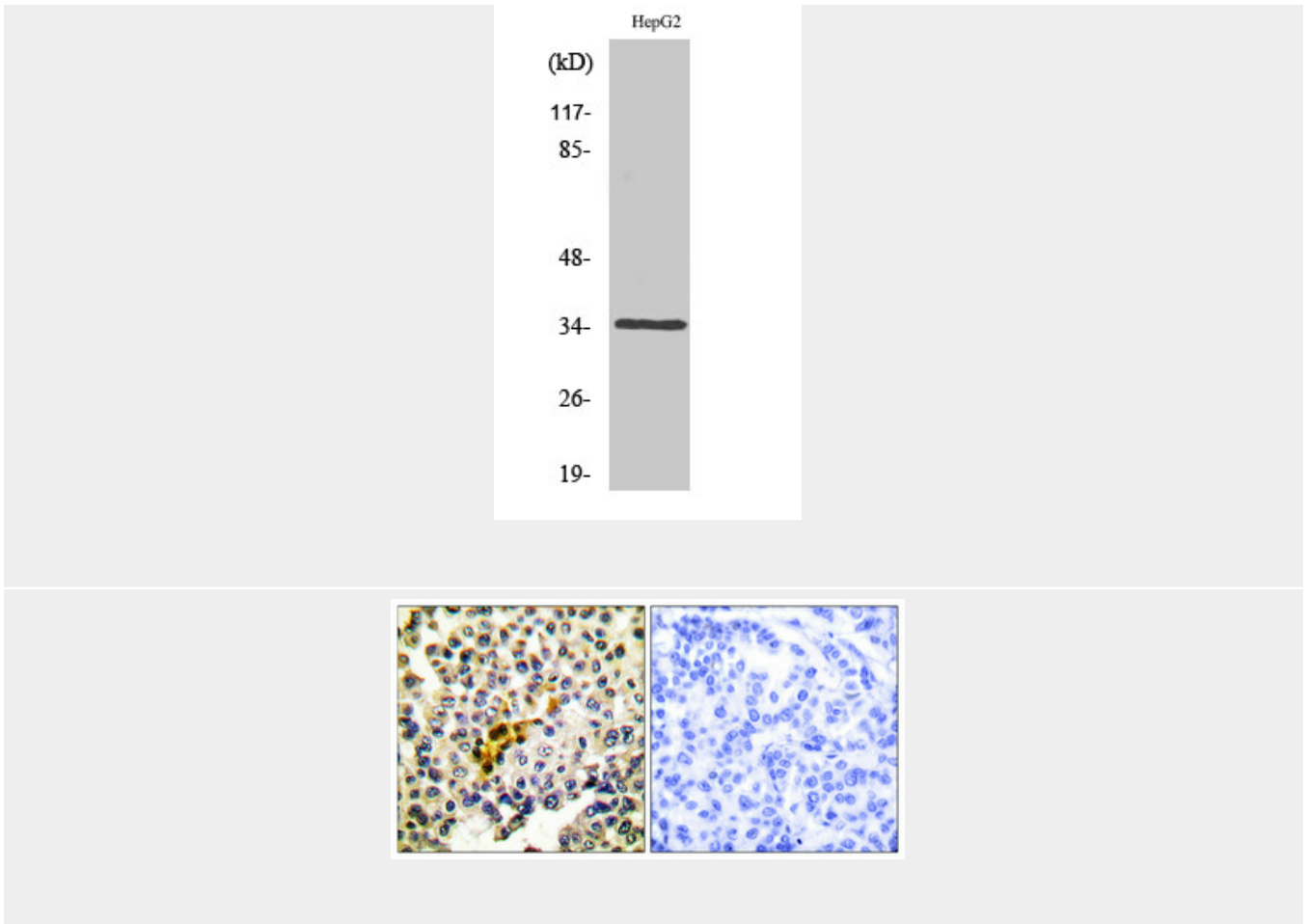
Caspase-6 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images





Caspase-6 Polyclonal 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.