

Caspase-6 (Active) Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10127**Specification**

Caspase-6 (Active) Antibody - Product Information

| | |
|-------------------|--------------------------|
| Application | WB |
| Primary Accession | P55212 |
| Other Accession | AAH00305 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 33310 |

Caspase-6 (Active) Antibody - Additional Information**Gene ID 839**

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|---------------------|--|
| Application & Usage | Western blotting (0.5-4 µg/ml) and immunofluorescence. However, the optimal conditions should be determined individually. The antibody detects the large subunit (18 kDa) of the active caspase-6. The antibody does not recognize other caspases. |
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Other Names

CASP6, CASP-6 , MCH2

Target/Specificity

Caspase-6 (Active)

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit anti-active caspase-6 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Caspase-6 (Active) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Caspase-6 (Active) 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: [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: [8663580](http://www.uniprot.org/citations/8663580), PubMed: [9463409](http://www.uniprot.org/citations/9463409), PubMed: [11953316](http://www.uniprot.org/citations/11953316), PubMed: [17401638](http://www.uniprot.org/citations/17401638)). 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)). 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 (Active) 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 (Active) Antibody - Images**Caspase-6 (Active) Antibody - Background**

Caspase family of cysteine proteases has been shown to play a key role in apoptosis. Similar to other caspases, caspase-6 is also synthesized as an inactive pro-enzyme that is processed in cells undergoing apoptosis. Together with caspase-3, caspase-6 is one of the major caspases in apoptotic cells, and functions downstream of apoptosis inhibitors Bcl-2 and Bcl-xL. Caspase-6 has also been shown involving in the proteolysis of poly (ADP-ribose) polymerase (PARP) and nuclear lamin A.