

Anti-Caspase-6 Picoband Antibody
Catalog # ABO12989**Specification**

Anti-Caspase-6 Picoband Antibody - Product Information

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

Description

Rabbit IgG polyclonal antibody for Caspase-6(CASP6) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Caspase-6 Picoband Antibody - Additional Information

Gene ID 839

Other Names

Caspase-6, CASP-6, 3.4.22.59, Apoptotic protease Mch-2, Caspase-6 subunit p18, Caspase-6 subunit p11, CASP6, MCH2

Calculated MW

33310 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

Cytoplasm.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E. coli-derived human Caspase-6 recombinant protein (Position: A194-N293). Human Caspase-6 shares 95.9% and 93.9% amino acid (aa) sequence identity with mouse and rat Caspase-6, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Caspase-6 Picoband 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), 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), PubMed: [8663580](http://www.uniprot.org/citations/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), PubMed: [17401638](http://www.uniprot.org/citations/17401638), PubMed: [8663580](http://www.uniprot.org/citations/8663580), PubMed: [9463409](http://www.uniprot.org/citations/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)). 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

Anti-Caspase-6 Picoband 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](#)

Anti-Caspase-6 Picoband Antibody - Images

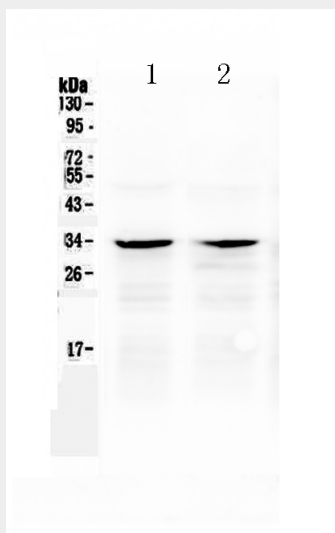


Figure 1. Western blot analysis of Caspase-6 using anti-Caspase-6 antibody (ABO12989).

Anti-Caspase-6 Picoband Antibody - Background

Caspase 6 is an enzyme that in humans is encoded by the CASP6 gene. This gene encodes a protein that is a member of the cysteine-aspartic acid protease (caspase) family. Using radiation hybrid mapping, the CASP6 gene is localized to human chromosome 4q25-q26. It functions as a downstream enzyme in the caspase activation cascade. And CASP6 can cleave lamin A to its signature apoptotic fragment.