

Anti-Caspase-6(P18) Antibody
Catalog # ABO10761**Specification****Anti-Caspase-6(P18) Antibody - Product Information**

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

Description

Rabbit IgG polyclonal antibody for Caspase-6(CASP6) detection. Tested with WB, IHC-P in Human.

Reconstitution

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

Anti-Caspase-6(P18) 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

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm.

Protein Name

Caspase-6(CASP-6)

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Caspase-6(P18)(24-44aa AFYKREMFDPAEKYKMDHRRR).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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.

Sequence Similarities

Belongs to the peptidase C14A family.

Anti-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](http://www.uniprot.org/citations/11953316) target="_blank">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) target="_blank">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) target="_blank">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) target="_blank">10559921, PubMed: [14657026](http://www.uniprot.org/citations/14657026) target="_blank">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) target="_blank">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) target="_blank">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) target="_blank">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) target="_blank">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

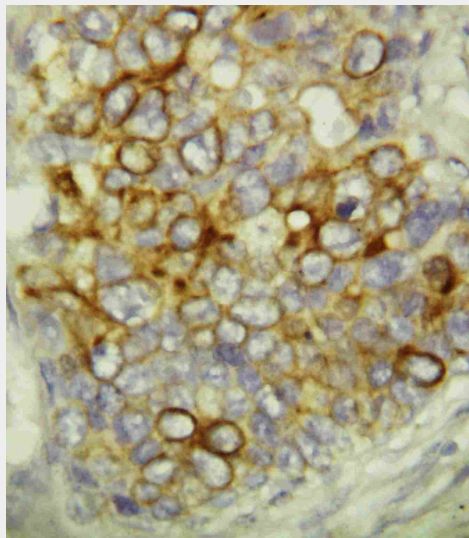
Cytoplasm. Nucleus

Anti-Caspase-6(P18) Antibody - Protocols

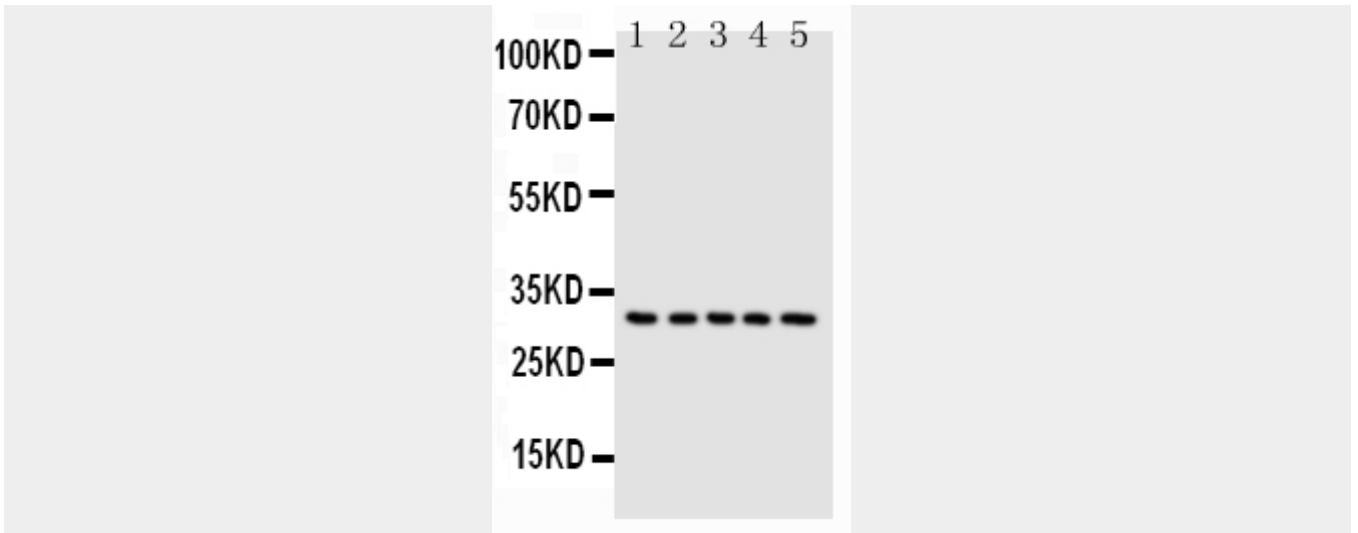
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Caspase-6(P18) Antibody - Images



Anti-Caspase-6(P18) antibody, ABO10761, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-Caspase-6(P18) antibody, ABO10761, Western blotting Lane 1: MCF-7 Cell Lysate Lane 2: HELA Cell Lysate Lane 3: JURKAT Cell Lysate Lane 4: CEM Cell Lysate Lane 5: SW620 Cell Lysate

Anti-Caspase-6(P18) Antibody - Background

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