

Anti-Caspase-6(P18) Antibody

Catalog # ABO10761

Specification

Anti-Caspase-6(P18) Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P55212
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit InG polyclonal antibody for Cas	pase-6(CASP6) detection Test

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)

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Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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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, PubMed:22858542, PubMed:27032039, PubMed:28864531, PubMed:30420425, PubMed:32298652, PubMed: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, PubMed:17401638, PubMed:8663580, PubMed: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

Anti-Caspase-6(P18) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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 blottingLane 1: MCF-7 Cell LysateLane 2: HELA Cell LysateLane 3: JURKAT Cell LysateLane 4: CEM Cell LysateLane 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.