

IHC-P, IHC-F in

Anti-Caspase-6(P18) Antibody

Catalog # ABO10762

### Specification

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

Application	WB, IHC
Primary Accession	<u>035397</u>
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for	Caspase-6(CASP6) detection. Tested with WB,
Mouse; Rat.	•

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

# Anti-Caspase-6(P18) Antibody - Additional Information

**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 31556 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat<br><br>Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Mouse<br>Western blot, 0.1-0.5 µg/ml, Mouse, Rat<br>

Subcellular Localization Cytoplasm .

Protein Name Caspase-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 rat Caspase-6(P18)(7-27aa FYRSREVLDPAEQYKMDHKRR), different from the related mouse sequence by two amino acids.

**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.

# Anti-Caspase-6(P18) Antibody - Protein Information

Name Casp6 {ECO:0000312|RGD:70967}

#### Function

Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (By similarity). 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. Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (By similarity). 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. Cleaves PARK7/DI-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1. Furthermore, cleaves many transcription factors such as NF-kappa-B and cAMP response element-binding protein/CREBBP (By similarity). Cleaves phospholipid scramblase proteins XKR4 and XKR9. In addition to apoptosis, involved in different forms of programmed cell death. 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. 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. Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death. Plays an essential role in axon degeneration during axon pruning which is the remodeling of axons during neurogenesis but not apoptosis. Regulates B-cell programs both during early development and after antigen stimulation (By similarity).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:P55212}. Nucleus {ECO:0000250|UniProtKB:P55212}

### 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, ABO10762, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Rat Kidney Tissue LysateLane 3: Rat Testis Tissue LysateLane 4: NRK Cell LysateLane 5: Mouse Liver Tissue LysateLane 6: Mouse Kidney Tissue LysateLane 7: Mouse Testis Tissue Lysate



Anti-Caspase-6(P18) antibody, ABO10762, IHC(P)IHC(P): Rat Spleen Tissue





Anti-Caspase-6(P18) antibody, ABO10762, IHC(P)IHC(P): Rat Intestine Tissue



Anti-Caspase-6(P18) antibody, ABO10762, IHC(P)IHC(P): Mouse Lung Tissue



Anti-Caspase-6(P18) antibody, ABO10762, IHC(F)IHC(F): Rat Spleen Tissue 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.