

# Caspase-6 p18 Antibody

Rabbit mAb Catalog # AP90756

### **Specification**

### Caspase-6 p18 Antibody - Product Information

Application WB, IP
Primary Accession P55212
Clonality Monoclonal

**Other Names** 

Apoptotic protease MCH2; CASP6; Caspase 6; Caspase 6 apoptosis related cysteine protease;

Caspase-6 subunit p11; Caspase-6 subunit p20; Mch2

Isotype Rabbit IgG
Host Rabbit
Calculated MW 33310 Da

# Caspase-6 p18 Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Caspase-6 p18

Description Caspase-6 is one of the major executioner

caspases functioning in cellular apoptotic processes. Involved in the activation cascade of caspases responsible for

apoptosis execution. Cleaves

poly(ADP-ribose) polymerase in vitro, as well as lamins. Overexpression promotes

programmed cell death.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### 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:<a href="http://www.uniprot.org/citations/19133298" target="\_blank">19133298</a>, PubMed:<a href="http://www.uniprot.org/citations/22858542" target="\_blank">22858542</a>, PubMed:<a href="http://www.uniprot.org/citations/27032039" target="\_blank">27032039</a>, PubMed:<a href="http://www.uniprot.org/citations/28864531" target="\_blank">28864531</a>, PubMed:<a href="http://www.uniprot.org/citations/30420425" target="\_blank">30420425</a>, PubMed:<a href="http://www.uniprot.org/citations/32298652" target="\_blank">32298652</a>, PubMed:<a href="http://www.uniprot.org/citations/8663580"



target=" blank">8663580</a>). 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:<a href="http://www.uniprot.org/citations/11953316" target="\_blank">11953316</a>, PubMed:<a href="http://www.uniprot.org/citations/17401638" target="blank">17401638</a>, PubMed:<a href="http://www.uniprot.org/citations/8663580" target=" blank">8663580</a>, PubMed:<a href="http://www.uniprot.org/citations/9463409" target="\_blank">9463409</a>). Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (PubMed: <a href="http://www.uniprot.org/citations/11953316" target=" blank">11953316</a>). 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:<a href="http://www.uniprot.org/citations/32029622" target=" blank">32029622</a>). Cleaves PARK7/DJ-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1 (PubMed: <a href="http://www.uniprot.org/citations/22858542" target=" blank">22858542</a>). Furthermore, cleaves many transcription factors such as NF-kappa-B and cAMP response element-binding protein/CREBBP (PubMed:<a href="http://www.uniprot.org/citations/10559921" target=" blank">10559921</a>, PubMed:<a href="http://www.uniprot.org/citations/14657026" target=" blank">14657026</a>). Cleaves phospholipid scramblase proteins XKR4 and XKR9 (By similarity). In addition to apoptosis, involved in different forms of programmed cell death (PubMed:<a href="http://www.uniprot.org/citations/32298652" target=" blank">32298652</a>). 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:<a href="http://www.uniprot.org/citations/32298652" target=" blank">32298652</a>). 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: <a href="http://www.uniprot.org/citations/32298652" target=" blank">32298652</a>). Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death (PubMed: <a href="http://www.uniprot.org/citations/32298652" target=" blank">32298652</a>). 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

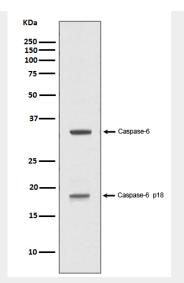
## Caspase-6 p18 Antibody - Protocols

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

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

#### Caspase-6 p18 Antibody - Images





Western blot analysis of Caspase-6 p18 expression in Jurkat cell treated with 1uM staurosporine lysate.