

## Caspase 6 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF4006a

### **Specification**

## Caspase 6 Antibody (internal region) - Product Information

Application WB
Primary Accession P55212

Other Accession <u>NP\_001217.2</u>, <u>NP\_116787.1</u>, <u>839</u>

Reactivity
Host
Clonality
Concentration
Contentration
Contentration
Concentration
Conc

Isotype IgG
Calculated MW 33310

# Caspase 6 Antibody (internal region) - 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

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Caspase 6 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## Caspase 6 Antibody (internal region) - 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/8663580" target="\_blank">8663580</a>, 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>). 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/8663580" target="\_blank">8663580</a>, PubMed:<a href="http://www.uniprot.org/citations/9463409" target="\_blank">9463409</a>, 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>). 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

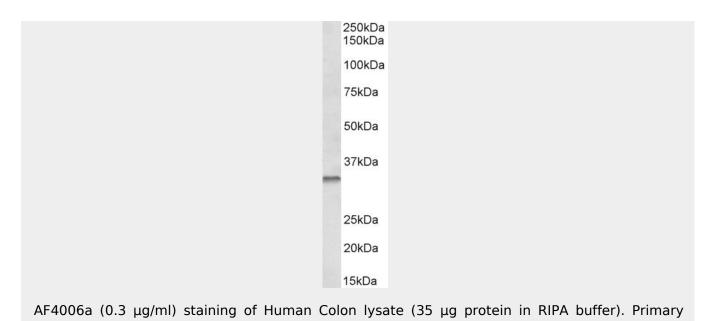
### Caspase 6 Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Caspase 6 Antibody (internal region) - Images





incubation was 1 hour. Detected by chemiluminescence.

Caspase 6 Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP 001217.2; NP 116787.1).

# Caspase 6 Antibody (internal region) - References

Allosteric peptides bind a caspase zymogen and mediate caspase tetramerization. Stanger K, Steffek M, Zhou L, Pozniak CD, Quan C, Franke Y, Tom J, Tam C, Elliott JM, Lewcock JW, Zhang Y, Murray J, Hannoush RN. Nature chemical biology 2012 Jul 8 (7): 655-60. PMID: 22683611