

Phospho-Caspase-6 (Ser257) antibody Purified Rabbit Polyclonal Antibody Catalog # ABV11672

### **Specification**

# Phospho-Caspase-6 (Ser257) antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P55212</u> <u>O08738 (Mouse)</u>, <u>O35397 (Rat)</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 33310

### Phospho-Caspase-6 (Ser257) antibody - Additional Information

Gene ID 839

Other Names CASP6; MCH2; Caspase-6; CASP-6; Apoptotic protease Mch-2

Target/Specificity Caspase-6 (Ser257)

**Formulation** 100ug (1mg/ml) of antibody in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Handling The antibody solution should be gently mixed before use

**Background Descriptions** 

**Precautions** Phospho-Caspase-6 (Ser257) antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Phospho-Caspase-6 (Ser257) antibody - Protein Information

Name CASP6 (<u>HGNC:1507</u>)

#### 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/2858542" 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

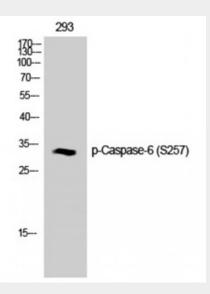
# Phospho-Caspase-6 (Ser257) antibody - Protocols

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

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

### Phospho-Caspase-6 (Ser257) antibody - Images





Western blot analysis of 293 cells using Phospho-Caspase-6(Ser257) Polyclonal antibody.

# Phospho-Caspase-6 (Ser257) antibody - Background

Caspases are the central components of the apoptotic response. Caspase 6 is a member of the cysteine-aspartic acid protease (caspase) family. Caspases are divided into two classes: the initiator caspases, which include caspase 2, 8, 9 and 10 and the effector caspases, which include caspases 3, 6 and 7. Effector caspases being activated by initiator caspases leads the proteolytic cleavage of a broad spectrum of cellular targets, which ultimately leads to cell death.