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CASP6 / Caspase 6 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11408

Specification

CASP6 / Caspase 6 Antibody (Internal) - Product Information

Application	**IF, WB, IHC**
Primary Accession	P55212
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

CASP6 / Caspase 6 Antibody (Internal) - 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

Target/Specificity
15 amino acid peptide from near the center of human Caspase-6

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
CASP6 / Caspase 6 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CASP6 / Caspase 6 Antibody (Internal) - Protein Information

Name CASP6 (HGNC:1507)

Function
Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed:8663580, PubMed:19133298, PubMed:22858542, PubMed:27032039, PubMed:28864531, PubMed:30420425, PubMed:32298652). 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:8663580, PubMed:<a

href="http://www.uniprot.org/citations/9463409" target="_blank">9463409, PubMed:11953316, PubMed:17401638). 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

CASP6 / Caspase 6 Antibody (Internal) - 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

CASP6 / Caspase 6 Antibody (Internal) - Images

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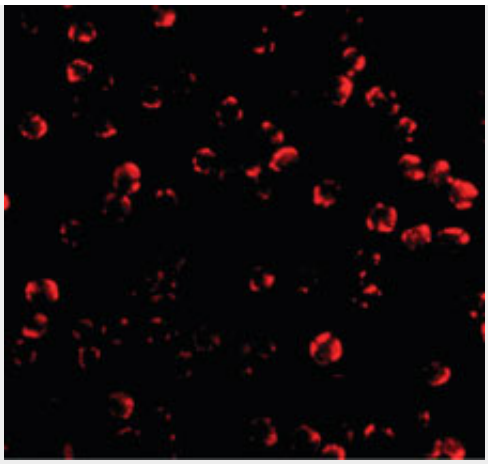
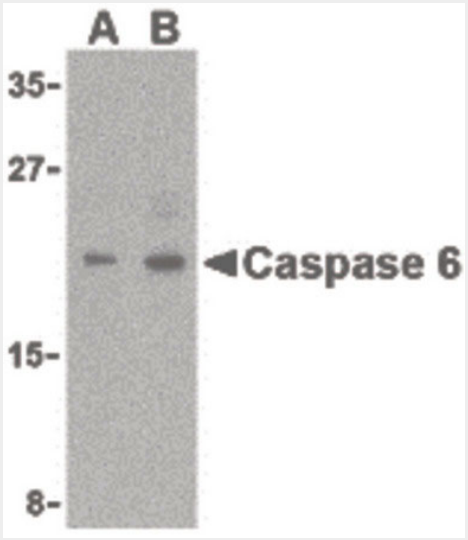
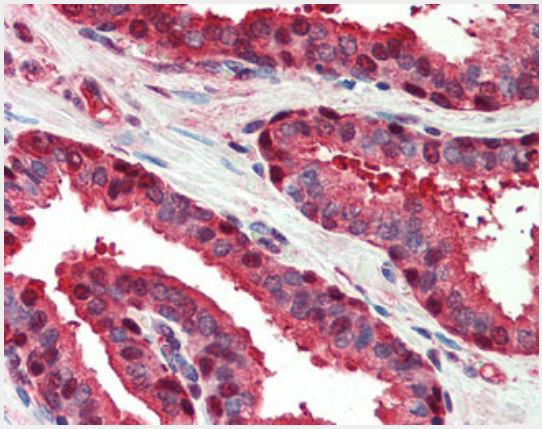


Immunofluorescence of Caspase 6 in MCF7 cells with Caspase 6 antibody at 10 ug/ml.



Western blot of Caspase-6 in MCF7 cell lysate with Caspase-6 antibody (IN) at (A) 1 and (B) 2 ug/ml.



Anti-Caspase 6 antibody IHC of human prostate.

CASP6 / Caspase 6 Antibody (Internal) - Background

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.

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Fernandes-Alnemri T.,et al.Cancer Res. 55:2737-2742(1995).
Srinivasula S.M.,et al.J. Biol. Chem. 271:27099-27106(1996).
Bartke T.,et al.Mol. Cell 14:801-811(2004).
Suzuki A.,et al.Oncogene 23:7067-7075(2004).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).