

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

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

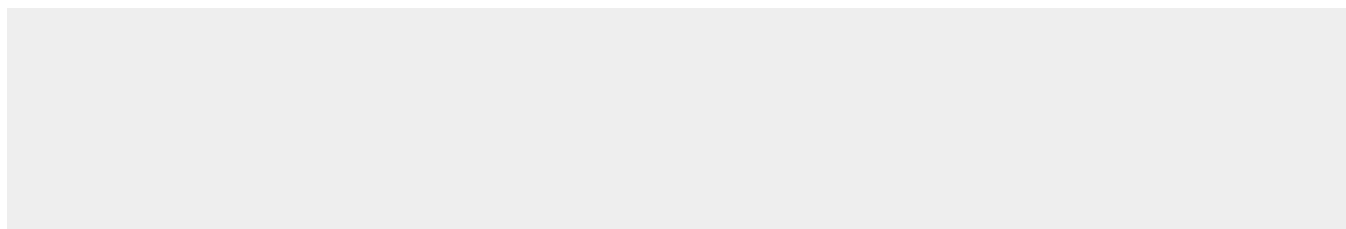
Cytoplasm. Nucleus

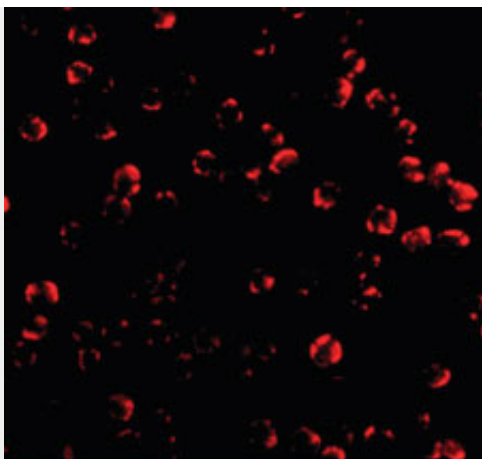
CASP6 / Caspase 6 Antibody (Internal) - Protocols

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

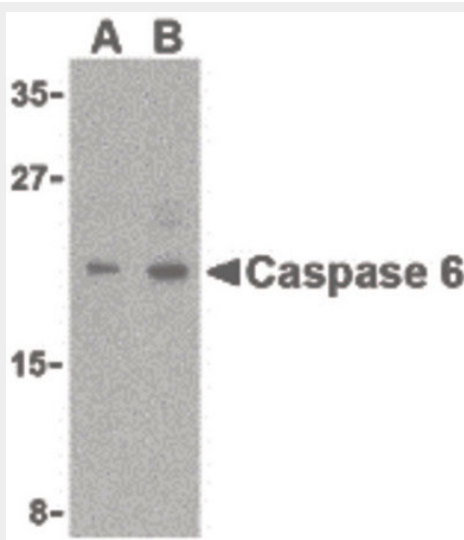
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CASP6 / Caspase 6 Antibody (Internal) - Images

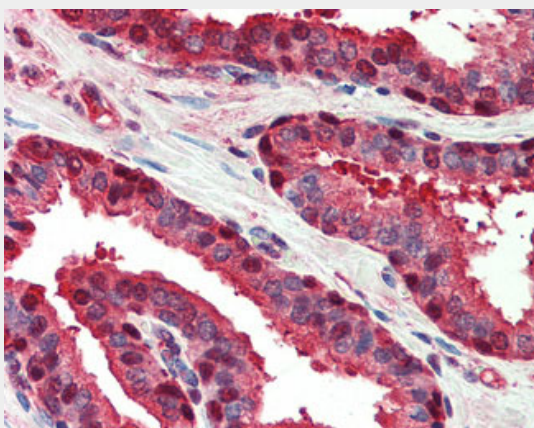




Immunofluorescence of Caspase 6 in MCF7 cells with Caspase 6 antibody at 10 ug/ml.



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.

CASP6 / Caspase 6 Antibody (Internal) - References

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).