

# Cleaved-Caspase-6 p18 (D179) Polyclonal Antibody

Catalog # AP63083

## Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	<a href="#">P55212</a>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33310

## Additional Information

Gene ID	839
Other Names	CASP6; MCH2; Caspase-6; CASP-6; Apoptotic protease Mch-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

Name	CASP6 ( <a href="#">HGNC:1507</a> )
Function	Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed: <a href="#">19133298</a> , PubMed: <a href="#">22858542</a> , PubMed: <a href="#">27032039</a> , PubMed: <a href="#">28864531</a> , PubMed: <a href="#">30420425</a> , PubMed: <a href="#">32298652</a> , PubMed: <a href="#">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="#">11953316</a> , PubMed: <a href="#">17401638</a> , PubMed: <a href="#">8663580</a> , PubMed: <a href="#">9463409</a> ). Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (PubMed: <a href="#">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="#">32029622</a> ). Cleaves PARK7/DJ-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1 (PubMed: <a href="#">22858542</a> ). 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).

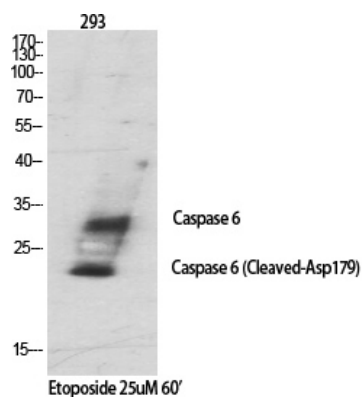
## Cellular Location

Cytoplasm. Nucleus

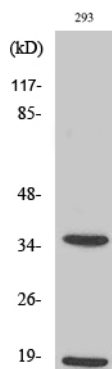
## Background

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.

## Images

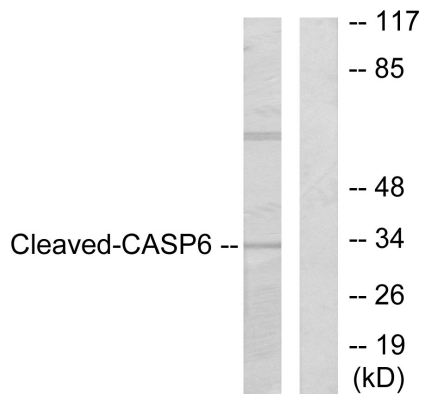
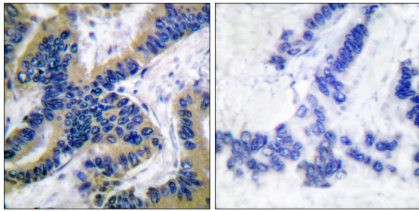


Western blot analysis of various cells using Cleaved-Caspase-6 p18 (D179) Polyclonal Antibody diluted at 1 : 1000



Western blot analysis of 293 cells using Cleaved-Caspase-6 p18 (D179) Polyclonal Antibody diluted at 1 : 1000

Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Caspase 6 (Cleaved-Asp162) Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Etoposide 25uM 60', using Caspase 6 (Cleaved-Asp162) Antibody. The lane on the right is blocked with the synthesized peptide.

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