

Cleaved-Caspase-6 p18 (D179) Polyclonal Antibody

Catalog # AP63083

Product Information

Application	WB, IHC-P
Primary Accession	<u>P55212</u>
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.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

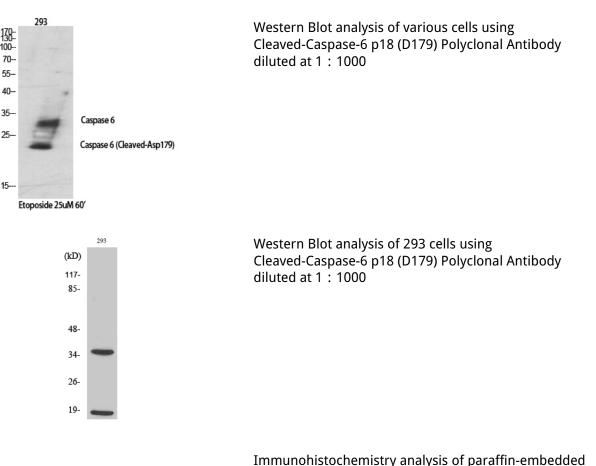
Name	CASP6 (<u>HGNC:1507</u>)
Function	Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed: <u>19133298</u> , PubMed: <u>22858542</u> , PubMed: <u>27032039</u> , PubMed: <u>28864531</u> , PubMed: <u>30420425</u> , PubMed: <u>32298652</u> , PubMed: <u>8663580</u>). 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: <u>11953316</u> , PubMed: <u>17401638</u> , PubMed: <u>8663580</u> , PubMed: <u>9463409</u>). Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (PubMed: <u>11953316</u>). 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: <u>32029622</u>). Cleaves PARK7/DJ-1 in cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1 (PubMed: <u>22858542</u>). 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:<u>32298652</u>). Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death (PubMed:<u>32298652</u>). 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

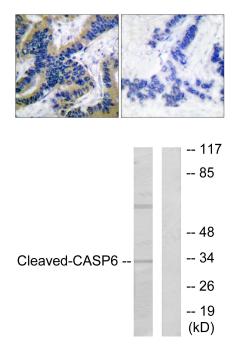
Background

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



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.