

CASP6 / Caspase 6 Antibody (aa130-179) Rabbit Polyclonal Antibody Catalog # ALS15144

Specification

CASP6 / Caspase 6 Antibody (aa130-179) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>P55212</u> Human, Rat Rabbit Polyclonal 33kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

CASP6 / Caspase 6 Antibody (aa130-179) - 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 Caspase 6 (Cleaved-Asp162) Antibody detects endogenous levels of fragment of activated Caspase 6 resulting from cleavage adjacent to Asp162.

Reconstitution & Storage Store at -20°C for up to one year.

Precautions CASP6 / Caspase 6 Antibody (aa130-179) is for research use only and not for use in diagnostic or therapeutic procedures.

CASP6 / Caspase 6 Antibody (aa130-179) - Protein Information

Name CASP6 (HGNC:1507)

Function

Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (PubMed:19133298, PubMed:22858542, PubMed:27032039, PubMed:28864531, PubMed:30420425, PubMed:30420425, PubMed:30420425, PubMed:302298652, PubMed:<a href="http://www.uniprot.org/citations/32298652"



target="_blank">8663580). 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:11953316, PubMed:17401638, PubMed:8663580, PubMed:9463409). 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

Volume 50 μl

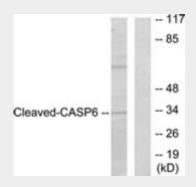
CASP6 / Caspase 6 Antibody (aa130-179) - Protocols

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>

CASP6 / Caspase 6 Antibody (aa130-179) - Images





Western blot of extracts from 293 cells, treated with Etoposide 25 uM 60', using Caspase 6... CASP6 / Caspase 6 Antibody (aa130-179) - 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 (aa130-179) - 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).