

CASP6 / Caspase 6 Antibody (aa130-179)

Rabbit Polyclonal Antibody Catalog # ALS15144

Specification

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

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

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:8663580, PubMed:19133298, PubMed:22858542, PubMed:27032039, PubMed:28864531, PubMed:30420425, 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:<a



href="http://www.uniprot.org/citations/8663580" target=" blank">8663580, PubMed: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

Cellular Location Cytoplasm. Nucleus

Volume 50 µl

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

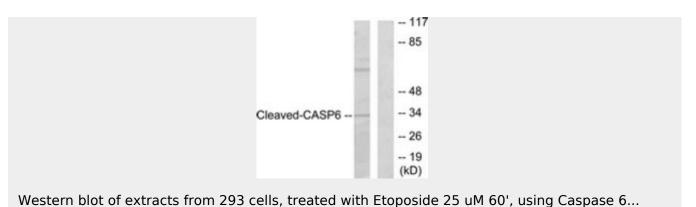
development and after antigen stimulation (By similarity).

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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





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).