

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI2419

Specification

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC <u>P55212</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 33 kDa, observed, 33 kDa KDa
Gene Name	CASP6
Allases	CASP6; Caspase 6; CSP-6; MCH2;
	Caspase-6; Caspase 6, Apoptosis-Related
	Cysteine Peptidase; Caspase 6,
	Apoptosis-Related Cysteine Protease;
	Mammalian Ced-3 Homologue 2; EC
	3.4.22.59; Apoptotic Protease MCH-2;
	Apoptotic Protease Mch-2; CASPASE-6; EC
	3.4.22; CASP-6
Immunogen	A synthesized peptide derived from human
	Caspase-6

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody - Additional Information

Gene ID 839 Other Names Caspase-6, CASP-6, CSP-6, 3.4.22.59, Apoptotic protease Mch-2, Caspase-6 subunit p18, Caspase-6 subunit p20, Caspase-6 subunit p11, Caspase-6 subunit p10, CASP6 (HGNC:1507)

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody - 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:19133298, PubMed:22858542, PubMed:22858542, PubMed:28864531, PubMed:28864531, PubMed:30420425, PubMed:30420425, PubMed:30420425, PubMed:30420425, PubMed:30420425, PubMed:30420425, PubMed:Attspace, PubMed:Attspace, PubMed:Attspace, PubMed:Attspace, PubMed:<a href="http://www.uniprot.org/citations/3663580"</



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/DI-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 (Bv 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

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody - Protocols

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

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

KO-Validated Anti-Caspase 6 Rabbit Monoclonal Antibody - Images





Western blotting analysis using anti-Caspase 6 antibody (Cat#AGI2419). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Caspase 6 antibody (Cat#AGI2419, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-caspase 6 antibody (Cat#AGI2419). Caspase 6 expression in wild type (WT) and caspase 6 (CASP6) knockout (KO) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-caspase 6 antibody (Cat#AGI2419, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Caspase 6 expression in HAP-1 cells using Caspase 6 antibody (Cat# AGI2419, 1:2,000). Green, isotype control; red, Caspase 6.