

Anti-Caspase 6 Antibody

Rabbit polyclonal antibody to Caspase 6 Catalog # AP60236

Product Information

Application WB Primary Accession P55212

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW33310

Additional Information

Gene ID 839

Other Names MCH2; Caspase-6; CASP-6; Apoptotic protease Mch-2

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human Caspase 6. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:32298652, PubMed: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: <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: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).

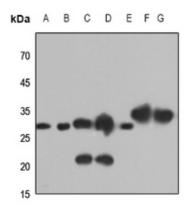
Cellular Location

Cytoplasm. Nucleus

Background

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Images



Western blot analysis of Caspase 6 expression in HEK293T (A), Hela (B), mouse brain (C), mouse kidney (D), mouse liver (E), rat kidney (F), rat liver (G) whole cell lysates.

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