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Caspase-6 Blocking Peptide
Catalog # PBV10107b

Specification

Caspase-6 Blocking Peptide - Product Information

Primary Accession	O35397
Other Accession	AAC25433
Gene ID	83584
Calculated MW	31556

Caspase-6 Blocking Peptide - Additional Information

Application & Usage

The peptide is used for blocking the antibody activity of Caspase-6. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C.

Target/Specificity
Caspase-6

Formulation
50 µg (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Caspase-6 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Caspase-6 Blocking Peptide - Protein Information

Name Casp6 {ECO:0000312|RGD:70967}

Function
Cysteine protease that plays essential roles in programmed cell death, axonal degeneration, development and innate immunity (By similarity). 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. Lamin-A/LMNA cleavage is required for chromatin condensation and nuclear disassembly during apoptotic execution (By similarity). 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. Cleaves PARK7/DJ-1 in

cells undergoing apoptosis (By similarity). Involved in intrinsic apoptosis by mediating cleavage of RIPK1. Furthermore, cleaves many transcription factors such as NF-kappa-B and cAMP response element-binding protein/CREBBP (By similarity). Cleaves phospholipid scramblase proteins XKR4 and XKR9. In addition to apoptosis, involved in different forms of programmed cell death. 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. 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. Mechanistically, interacts with RIPK3 and enhances the interaction between RIPK3 and ZBP1, leading to ZBP1-mediated inflammasome activation and cell death. Plays an essential role in axon degeneration during axon pruning which is the remodeling of axons during neurogenesis but not apoptosis. Regulates B-cell programs both during early development and after antigen stimulation (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P55212}. Nucleus {ECO:0000250|UniProtKB:P55212}

Caspase-6 Blocking Peptide - 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
- Cell Culture

Caspase-6 Blocking Peptide - Images