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Anti-Caspase-9 Antibody
Catalog # ABO10909

Specification

Anti-Caspase-9 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P55211
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Caspase-9(CASP9) detection. Tested with WB, IHC-P in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Caspase-9 Antibody - Additional Information

Gene ID 842

Other Names
Caspase-9, CASP-9, 3.4.22.62, Apoptotic protease Mch-6, Apoptotic protease-activating factor 3, APAF-3, ICE-like apoptotic protease 6, ICE-LAP6, Caspase-9 subunit p35, Caspase-9 subunit p10, CASP9, MCH6

Calculated MW
46281 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Tissue Specificity
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.
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Protein Name
Caspase-9(CASP-9)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human Caspase-9(183-198aa SNIDCEKLRRRFSSLH).

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the peptidase C14A family.

Anti-Caspase-9 Antibody - Protein Information

Name CASP9

Synonyms MCH6

Function
Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates effector caspases caspase-3 (CASP3) or caspase-7 (CASP7). Promotes DNA damage- induced apoptosis in a ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (PubMed:36758105, PubMed:36758106).

Tissue Location
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Anti-Caspase-9 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
- Cell Culture

Anti-Caspase-9 Antibody - Images

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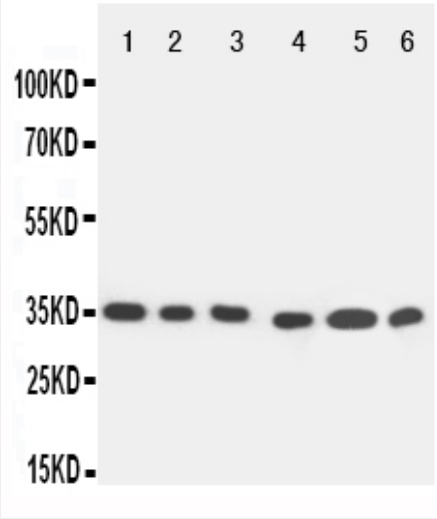
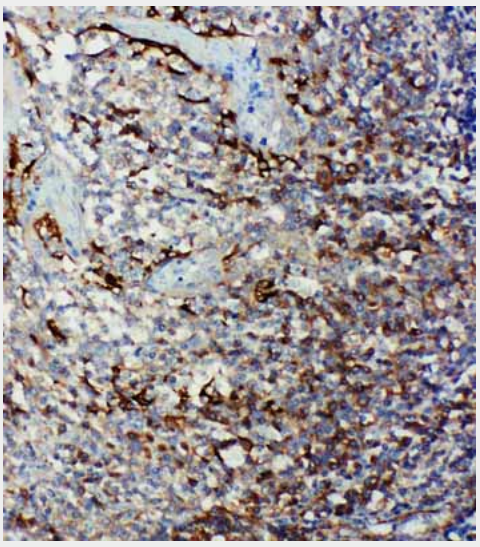


Anti-Caspase-9 antibody, ABO10909, Western blottingAll lanes: Anti Caspase-9 (ABO10909) at 0.5ug/mlLane 1: SMMC Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: CEM Whole Cell Lysate at 40ugLane 4: JURKAT Whole Cell Lysate at 40ugLane 5: RAJI Whole Cell Lysate at 40ugLane 6: HELA Whole Cell Lysate at 40ugPredicted bind size: 35KDObserved bind size: 35KD



Anti-Caspase-9 antibody, ABO10909, IHC(P)IHC(P): Human Tonsil Tissue

Anti-Caspase-9 Antibody - Background

CASP9(CASPASE9), also called APAF3, is an initiator caspase, encoded by the CASP9 gene. The CASP9 gene is mapped to chromosome 1p36.3-p36.1 by FISH. CASP9 is identified as a member of the caspase family that participates in caspase-3 activation in vitro. And it also regarded as the most upstream member of the apoptotic protease cascade that is triggered by cytochrome c and dATP. Its genomic coordinates(GRCh37) is 1:15,818,768-15,851,284. The crystal structure of CASP9 is complex with the BIR3 in an inhibitory domain of XIAP at 2.4-angstrom resolution and the CASP9 gene contains 9 exons and spans approximately 35 kb of genomic DNA. Caspase-9 and APAF1 bind to each other via their respective NH2-terminal CED-3 homologous domains in the presence of cytochrome c and dATP, an event that leads to caspase-9 activation. CASP9 activity increases dramatically upon association with the apoptosome complex. And the majority of Casp9 knockout mice died perinatally with a markedly enlarged and malformed cerebrum caused by reduced apoptosis during brain development.