

Product Name: Caspase 9(3-20)Mouse Monoclonal Antibody
Catalog #: AMM07955



Summary

Production Name	Caspase 9(3-20)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,IHC,IF
Reactivity	Human,Mouse,Rat,chicken

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	PBS, pH 7.4, containing 0.5%BSA, 0.02% New type preservative N as Preservative and 50% Glycerol.
Purification	Affinity purification

Immunogen

Gene Name	CASP9
Alternative Names	CASP9; MCH6; Caspase-9; CASP-9; Apoptotic protease Mch-6; Apoptotic protease-activating factor 3; APAF-3; ICE-like apoptotic protease 6; ICE-LAP6
Gene ID	842.0
SwissProt ID	P55211.Synthetic Peptide of Caspase 9

Application

Dilution Ratio	WB 1:1000-5000 IP:1:200 IF 1:200 IHC 1:50-300
Molecular Weight	46kD

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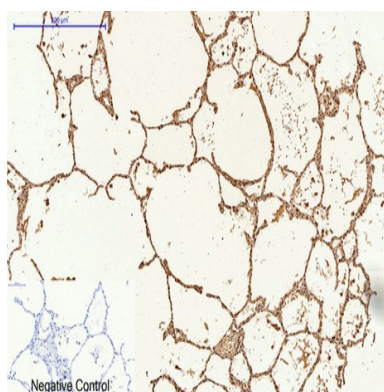
Background

CASP9 encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. Caspase 9 can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. Caspase 9 is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants. catalytic activity: Strict requirement for an Asp residue at position P1 and with a marked preference for His at position P2. It has a preferred cleavage sequence of Leu-Gly-His-Asp-[Xaa], 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 caspase-3. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP), function: Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9, online information: Caspase-9 entry, PTM: Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and -10 can also be involved in these processing events, similarity: Belongs to the peptidase C14A family, similarity: Contains 1 CARD domain, subunit: Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 35 kDa (p35) and a 10 kDa (p10) subunit. Caspase-9 and APAF1 bind to each other via their respective NH2-terminal CED-3 homologous domains in the presence of cytochrome C and ATP. Interacts with the inhibitors BIRC2, BIRC4, BIRC5 and BIRC7, tissue specificity: Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues,

Research Area

p53; Apoptosis_Inhibition; Apoptosis_Mitochondrial; Apoptosis_Overview; VEGF; Alzheimer's disease; Parkinson's disease; Amyotrophic lateral sclerosis (ALS); Huntington's disease; Pathways in cancer; Colorectal cancer; Pancreatic cancer; Endometrial cancer; Prostate cancer; Small cell lung cancer; Non-small cell lung cancer; Viral myocarditis;

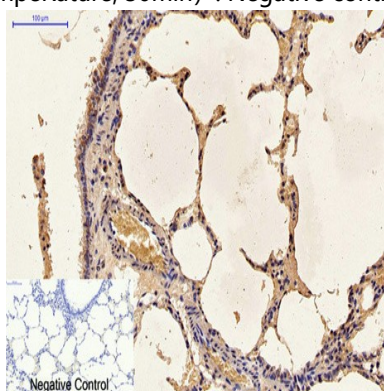
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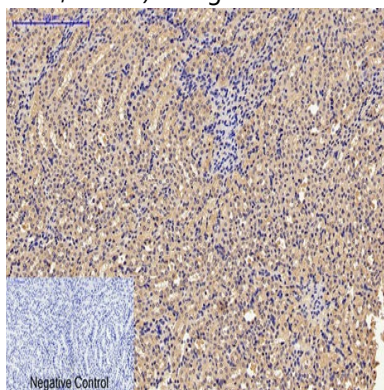
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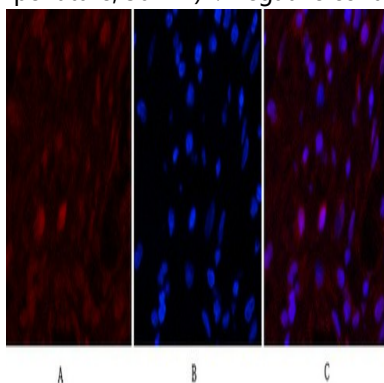
Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1,Caspase 9 Monoclonal Antibody (3-20) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,Caspase 9 Monoclonal Antibody (3-20) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,Caspase 9 Monoclonal Antibody (3-20) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.

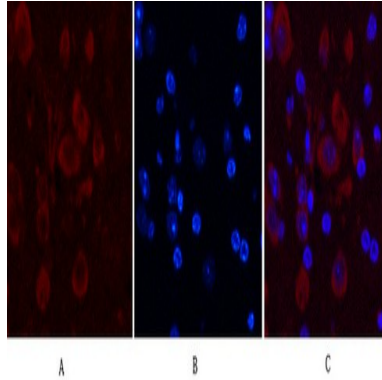


Immunofluorescence analysis of Human-appendix tissue. 1,Caspase 9 Monoclonal Antibody (3-20) (red) was diluted at

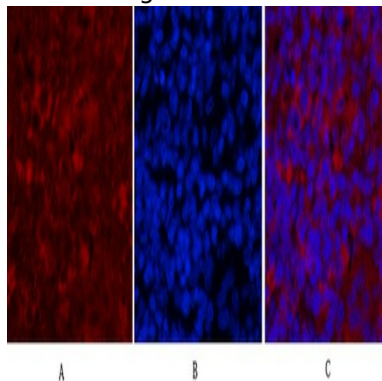
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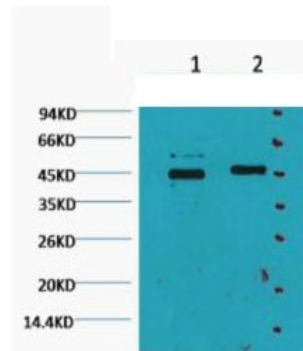
1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B:
DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Mouse-brain tissue. 1,Caspase 9 Monoclonal Antibody (3-20) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B:
DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

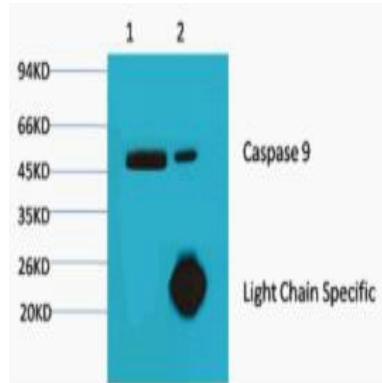


Immunofluorescence analysis of Rat-spleen tissue. 1,Caspase 9 Monoclonal Antibody (3-20) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B:
DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

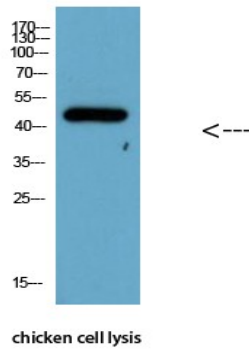


Western blot analysis of HeLa, diluted at1) 1:2000 2) 1:5000

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1) Input: HeLa Cell Lysate 2) IP product: IP dilute 1:200



Western Blot analysis of chicken cell lysis using Antibody diluted at 1:1000

Note

For research use only.