

Summary

Production Name	Caspase-9 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
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.The antiserum was produced against synthesized peptide derived from human Caspase 9. AA range:91-140

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Molecular Weight	46kD

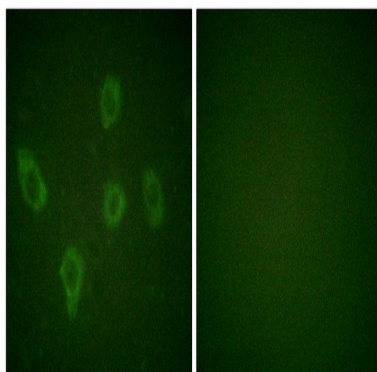
Background

This gene 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. This protein 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. This protein is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013],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;

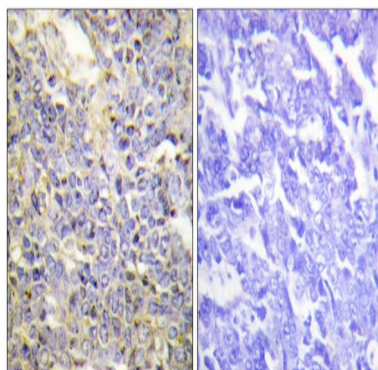
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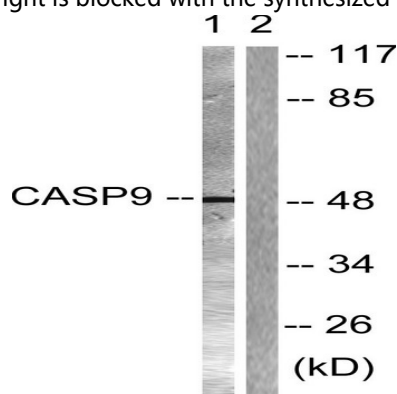
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Catalog #: APRab07989



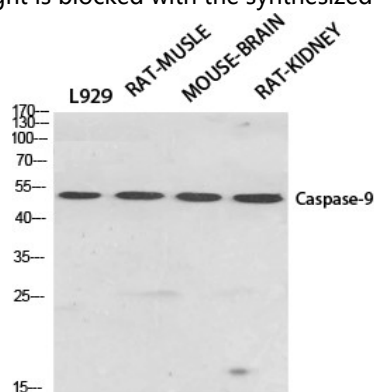
Immunofluorescence analysis of HUVEC cells, using Caspase 9 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Caspase 9 Antibody. The picture on the right is blocked with the synthesized peptide.

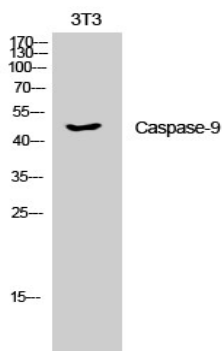


Western blot analysis of lysates from NIH/3T3 cells, treated with TNF- α 20ng/ml 30', using Caspase 9 Antibody. The lane on the right is blocked with the synthesized peptide.

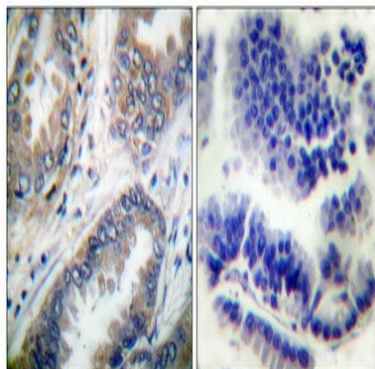


Western Blot analysis of various cells using Caspase-9 Polyclonal Antibody diluted at 1: 500

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Western Blot analysis of 3T3 cells using Caspase-9 Polyclonal Antibody diluted at 1: 500



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.