



Caspase 9 Monoclonal Antibody(3-20)

Catalog No	YP-Ab-00114
Isotype	IgG
Reactivity	Human;Mouse;Rat;chicken
Applications	WB;IHC;IF;IP
Gene Name	CASP9
Protein Name	Caspase9
Immunogen	Synthetic Peptide of Caspase 9
Specificity	The antibody detects endogenous Caspase 9 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:1000-5000 IP:1:200 IF 1:200 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CASP9; MCH6; Caspase-9; CASP-9; Apoptotic protease Mch-6; Apoptotic protease-activating factor 3; APAF-3; ICE-like apoptotic protease 6; ICE-LAP6
Observed Band	46kD
Cell Pathway	nucleus,mitochondrion,cytosol,apoptosome,
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.
Function	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

**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.

matters needing attention

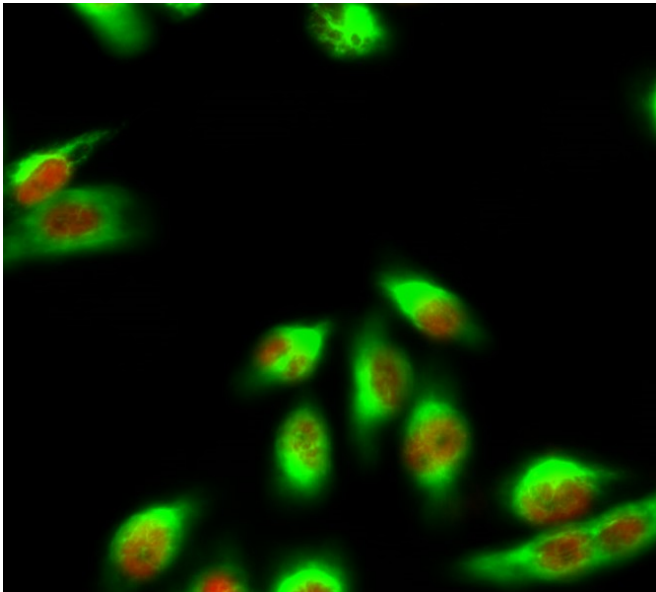
Avoid repeated freezing and thawing!

Usage suggestions

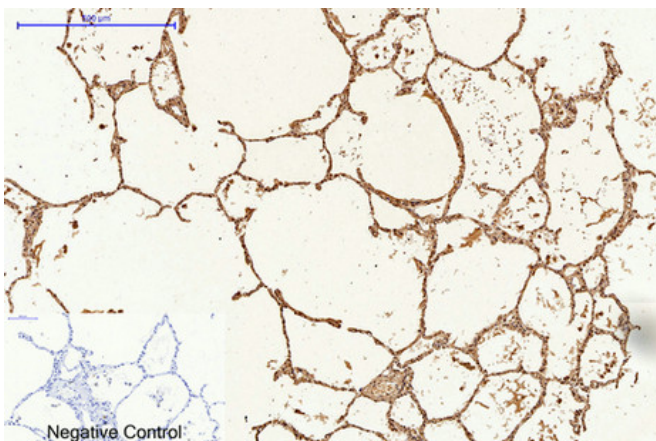
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



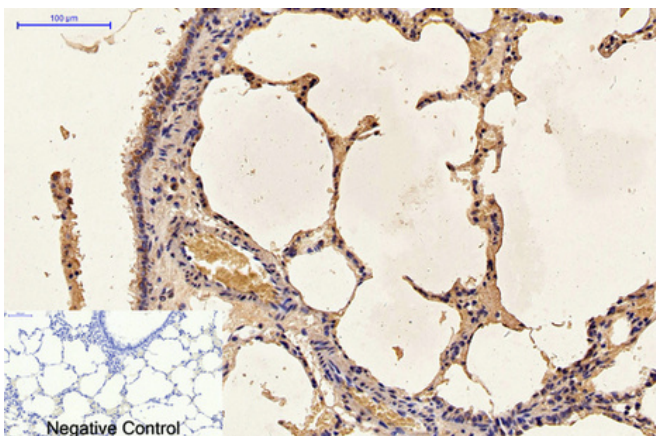
Products Images



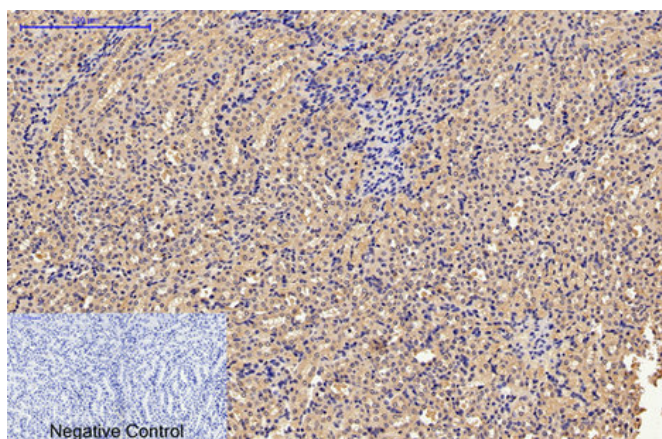
Immunofluorescence analysis of Hela cell. 1, eIF2 α Polyclonal Antibody (red) was diluted at 1:200 (4 $^{\circ}$ overnight). Caspase 9 Monoclonal Antibody (3-20) (green) was diluted at 1:200 (4 $^{\circ}$ overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



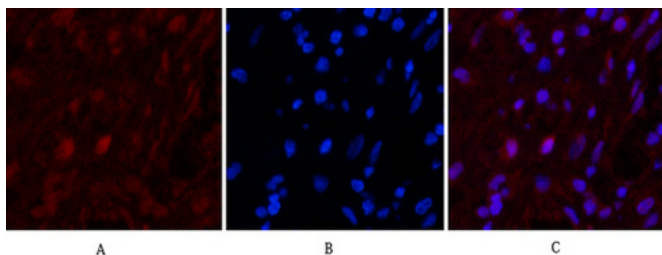
Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1, Caspase 9 Monoclonal Antibody (3-20) was diluted at 1:200 (4 $^{\circ}$ C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 $^{\circ}$ C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 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 $^{\circ}$ C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 $^{\circ}$ 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 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