

Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody

Catalog No :	YC0014
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	Caspase-9
Fields :	>>Platinum drug resistance;>>p53 signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Apoptosis - multiple species;>>VEGF signaling pathway;>>Thyroid hormone signaling pathway;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Pathogenic Escherichia coli infection;>>Legionellosis;>>Toxoplasmosis;>>Tuberculosis;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human cytomegalovirus infection;>>Influenza A;>>Kaposi sarcoma-associated herpesvirus infection;>>Herpes simplex virus 1 infection;>>Epstein-Barr virus infection;>>Human immunodeficiency virus 1 infection;>>Pathways in cancer;>>Colorectal cancer;>>Pancreatic cancer;>>Endometrial cancer;>>Prostate cancer;>>Small cell lung cancer;>>Non-small cell lung cancer;>>Viral myocarditis;>>Lipid and atherosclerosis
Gene Name :	CASP9
Protein Name :	Caspase9
Human Gene Id :	842
Human Swiss Prot No :	P55211
Immunogen :	The antiserum was produced against synthesized peptide derived from human Caspase 9. AA range:266-315
Specificity :	Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody detects endogenous levels of fragment of activated Caspase-9 p35 protein resulting from cleavage adjacent to D315.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution : WB 1:500-2000, IHC 1:50-300, IF 1:50-300

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15 °C to -25 °C/1 year(Do not lower than -25 °C)

Observed Band : 35 46kD

Cell Pathway : 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

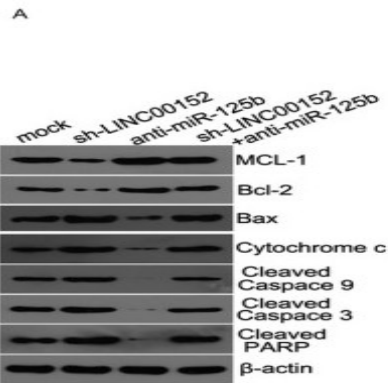
Background : CASP9 encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 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.

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

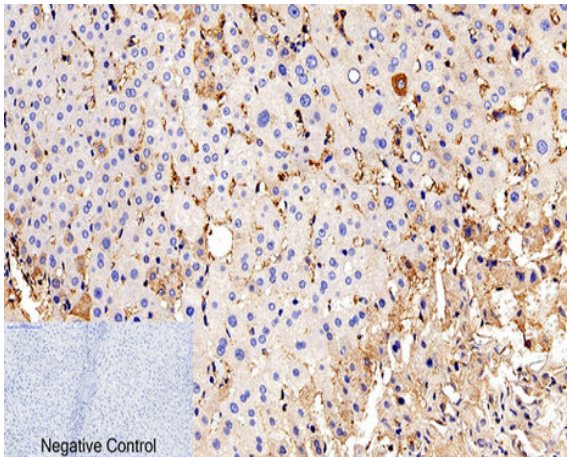
Subcellular Location : nucleus,mitochondrion,cytosol,apoptosome,

Expression : 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.

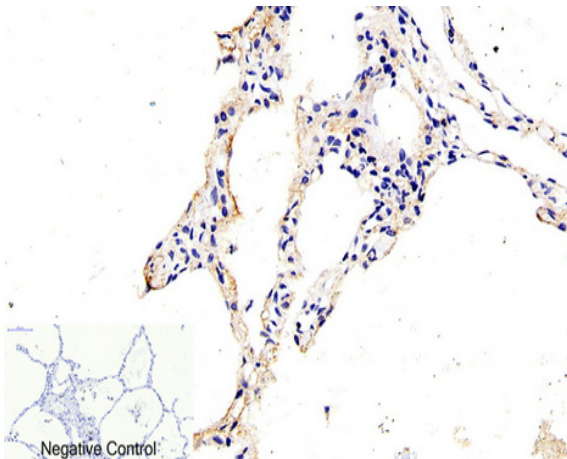
Products Images



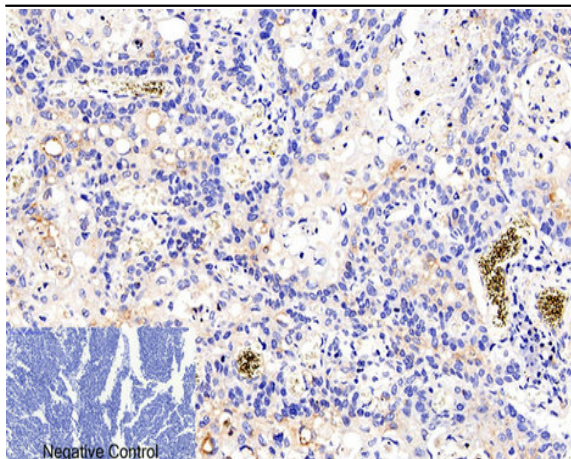
Chen, Puxiang, et al. "Long noncoding RNA LINC00152 promotes cell proliferation through competitively binding endogenous miR-125b with MCL-1 by regulating mitochondrial apoptosis pathways in ovarian cancer." *Cancer medicine* 7.9 (2018): 4530-4541.



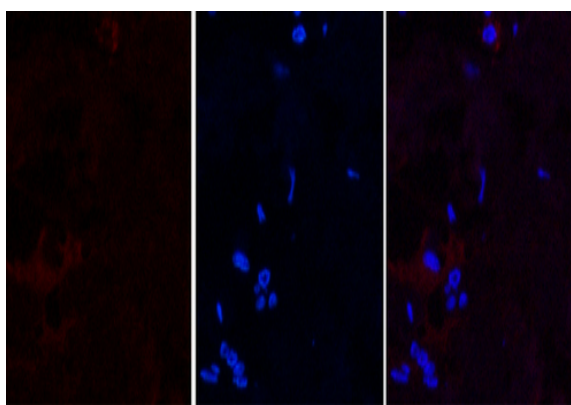
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1, Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



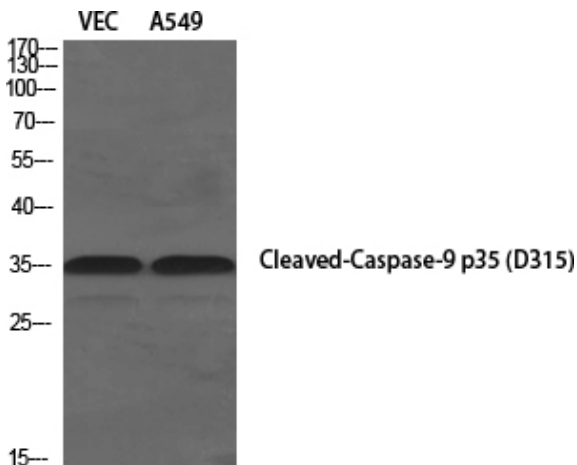
Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1, Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



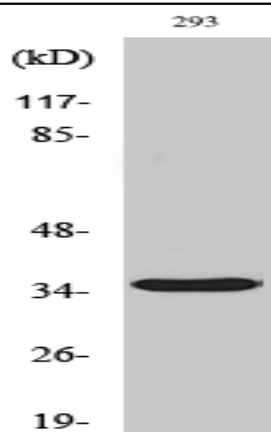
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1, Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



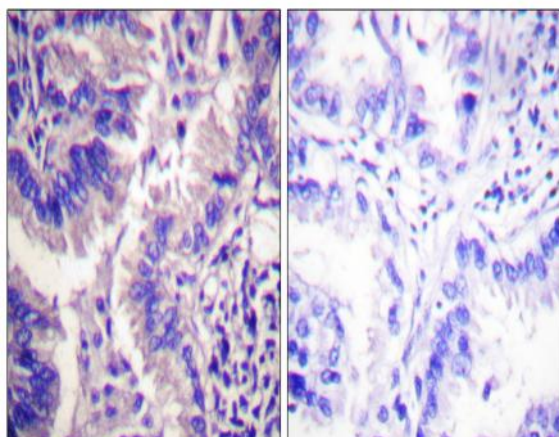
Immunofluorescence analysis of Human-breast tissue. 1, Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western Blot analysis of various cells using Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody diluted at 1:1000



Western Blot analysis of 293 cells using Cleaved-Caspase-9 p35 (D315) Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Caspase 9 (Cleaved-Asp315) Antibody. The picture on the right is blocked with the synthesized peptide.