Best Tools for immunology Research

Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody

Catalog No :	YC0006
Reactivity :	Human;Mouse;Rat
Applications :	WB;IF;IHC;ELISA
Target :	Caspase-3
Fields :	>>Platinum drug resistance;>>MAPK signaling pathway;>>p53 signaling pathway;>>Apoptosis;>>Apoptosis - multiple species;>>Natural killer cell mediated cytotoxicity;>>IL-17 signaling pathway;>>TNF signaling pathway;>>Serotonergic synapse;>>Non-alcoholic fatty liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>Alcoholic liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Epithelial cell signaling in Helicobacter pylori infection;>>Pathogenic Escherichia coli infection;>>Salmonella infection;>>Pertussis;>>Legionellosis;>>Toxoplasmosis;>>Amoebiasis;>>Tuberculosis;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human cytomegalovirus infection;>>Influenza A;>>Human papillomavirus infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Herpes simplex virus 1 infection;>>Epstein-Barr virus infection;>>Human immunodeficiency virus 1 infection;>>Pathways i
Gene Name :	CASP3
Protein Name :	Caspase3
Human Gene Id :	836
Human Swiss Prot No :	P42574
Mouse Gene Id :	12367
Mouse Swiss Prot No :	P70677
Rat Gene Id :	25402
Rat Swiss Prot No :	P55213

Immunogen : The antiserum was produced against synthesized peptide derived from human Caspase 3. AA range:126-175

Specificity : Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody detects endogenous levels of fragment of activated Caspase-3 p17 protein resulting from cleavage adjacent to D175.

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 : 17 34kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;p53;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Natural killer cell mediated cytotoxicity;Alzheimer's disease;Parkinson's disease;Amyotrophic lateral

Background : This gene encodes a protein which is 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 cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. Alternative splicing of this gene results in two transcript variants that encode the same protein. [provided by RefSeq, Jul 2008],

Function : catalytic activity:Strict requirement for an Asp residue at positions P1 and P4. It has a preferred cleavage sequence of Asp-Xaa-Xaa-Asp-|- with a hydrophobic amino-acid residue at P2 and a hydrophilic amino-acid residue at P3, although Val or Ala are also accepted at this position.,enzyme regulation:Inhibited by isatin sulfonamides.,function:Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane

attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin.,PTM:Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Ad

Subcellular Location : Cytoplasm.

Expression : Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.

Tag : orthogonal,hot

Sort : 1

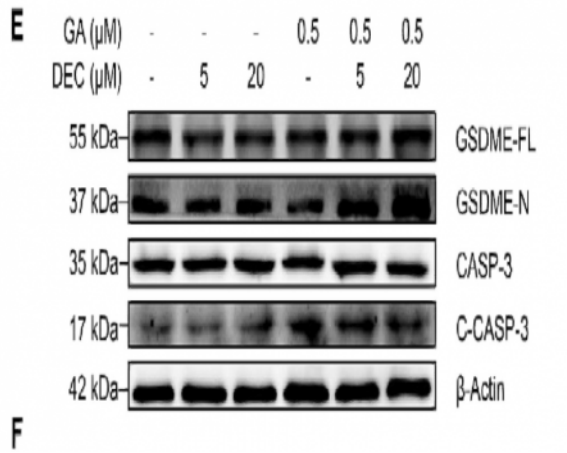
No3 : ab32042

No4 : 1

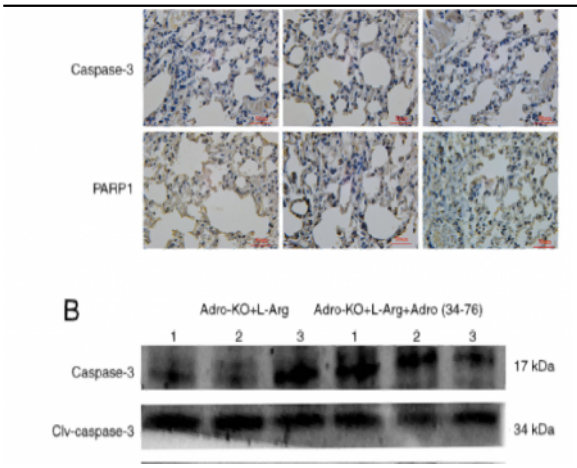
Host : Rabbit

Modifications : Unmodified

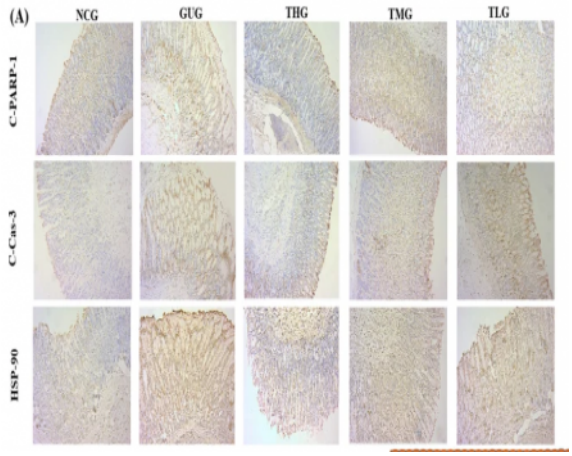
Products Images



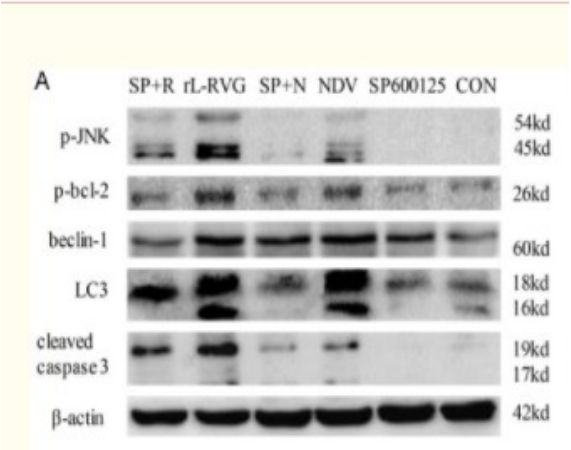
Postsurgical wound management and prevention of triple-negative breast cancer recurrence with a pryoptosis-inducing, photopolymerizable hydrogel JOURNAL OF CONTROLLED RELEASE Sanjun Shi WB Mouse 4 T1 cell



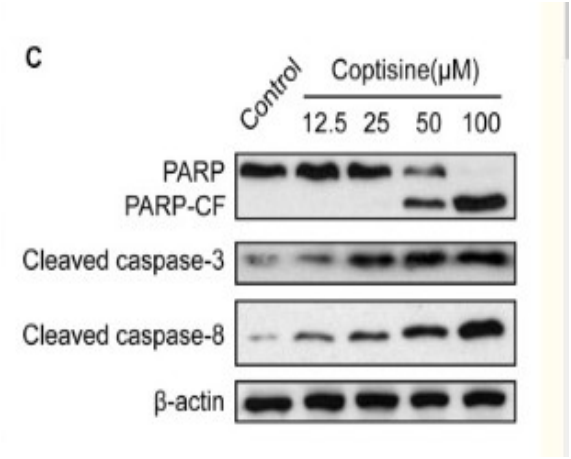
Adropin attenuates pancreatitis-associated lung injury through PPARγ phosphorylation-related macrophage polarization. INTERNATIONAL JOURNAL OF MOLECULAR MEDICINE Shangeng Weng WB Mouse 1:1000 lung tissue



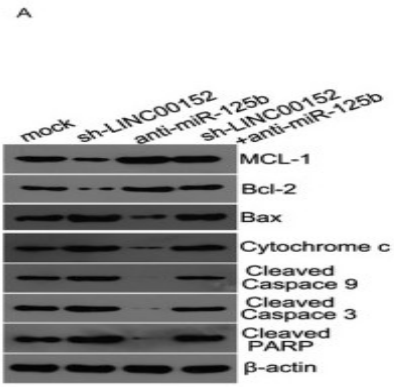
Guo, H., Chen, B., Yan, Z. et al. Metabolites profiling and pharmacokinetics of troxipide and its pharmacodynamics in rats with gastric ulcer. Sci Rep 10, 13619 (2020).



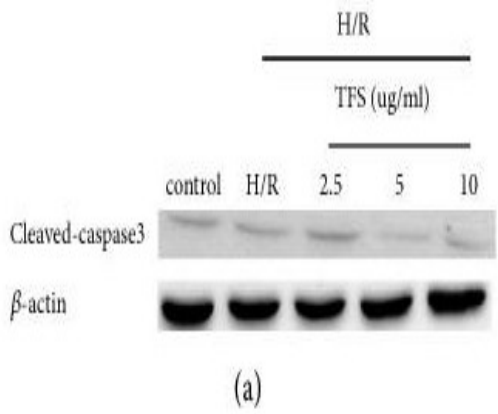
Bu, Xuefeng, et al. "Recombinant Newcastle disease virus (rL-RVG) triggers autophagy and apoptosis in gastric carcinoma cells by inducing ER stress." American journal of cancer research 6.5 (2016): 924.



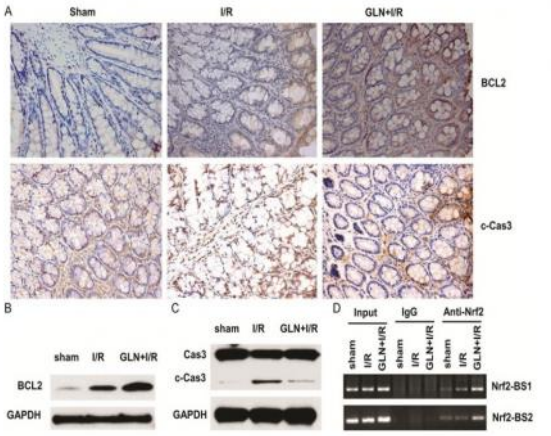
Zhou, Li, et al. "Coptisine induces apoptosis in human hepatoma cells through activating 67-kDa laminin receptor/cGMP signaling." Frontiers in pharmacology 9 (2018).



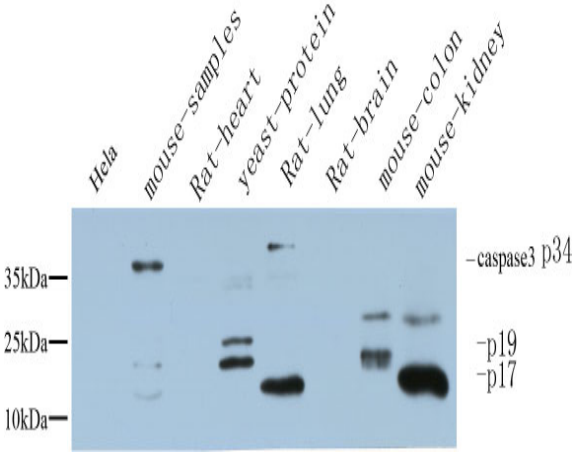
Chen, Puxiang, et al. "Long noncoding RNA LINC00152 promotes cell proliferation through competitively binding endogenous miR-125b with MCL-1 by regulating mitochondrial apoptosis pathways in ovarian cancer." Cancer medicine 7.9 (2018): 4530-4541.



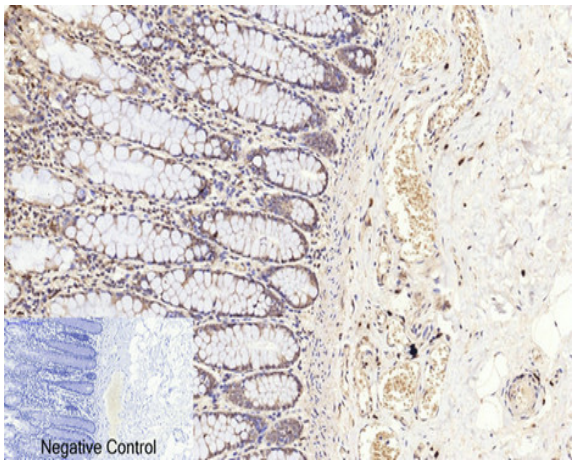
Jiang, Ruibin, et al. "Total Flavonoids from Carya cathayensis Sarg. Leaves Alleviate H9c2 Cells Hypoxia/Reoxygenation Injury via Effects on miR-21 Expression, PTEN/Akt, and the Bcl-2/Bax Pathway." Evidence-Based Complementary and Alternative Medicine 2018 (2018).



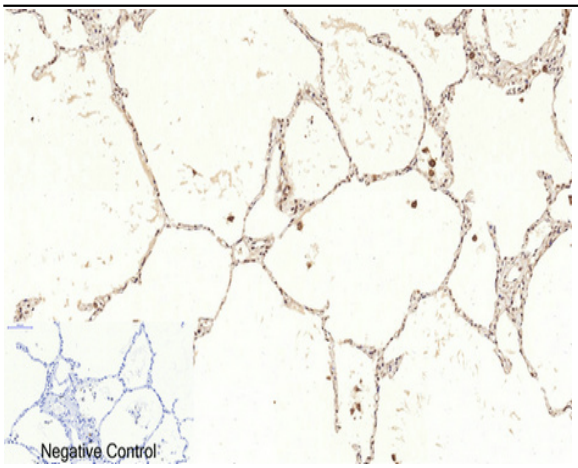
Wang, Ai-Li, et al. "Glutamine ameliorates intestinal ischemia-reperfusion Injury in rats by activating the Nrf2/Are signaling pathway." International journal of clinical and experimental pathology 8.7 (2015): 7896.



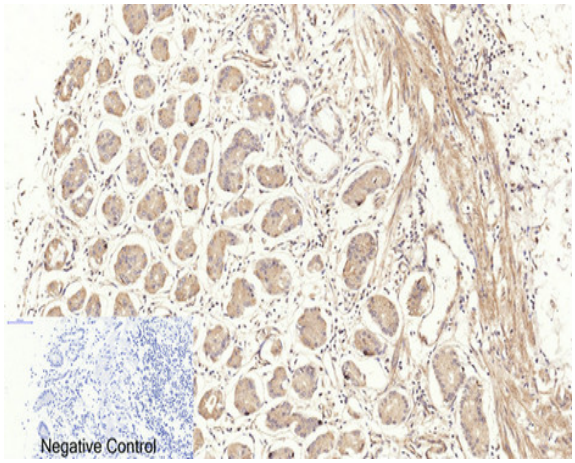
Western Blot analysis of various cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).



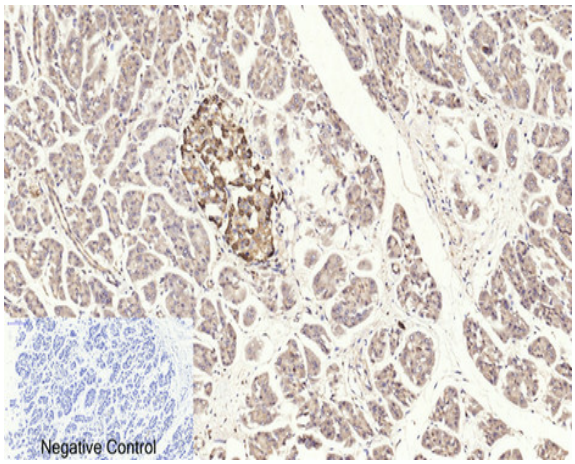
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



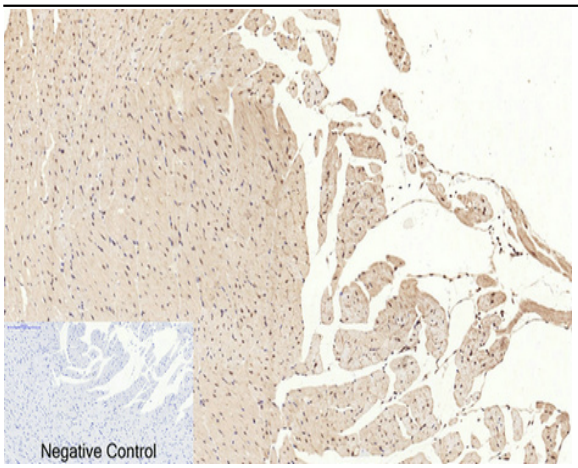
Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



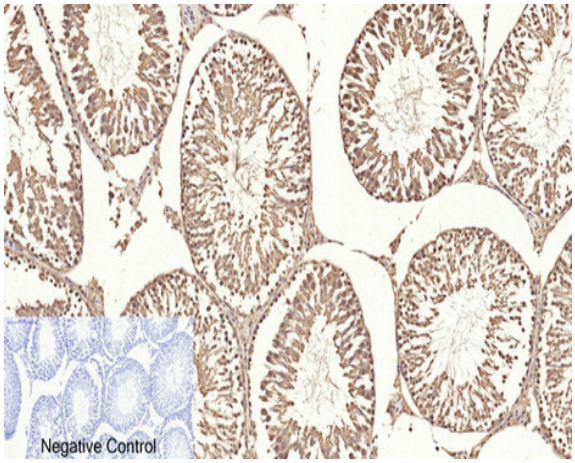
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



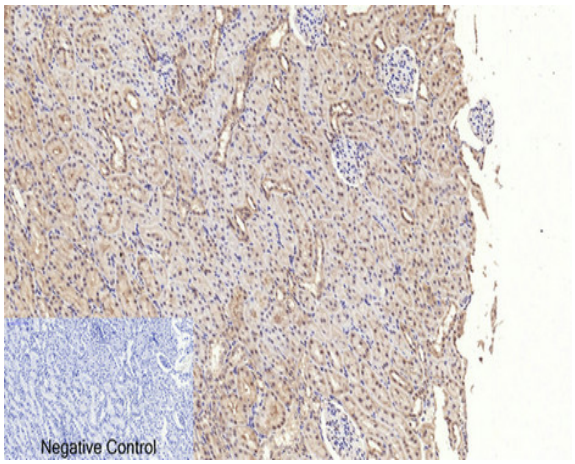
Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



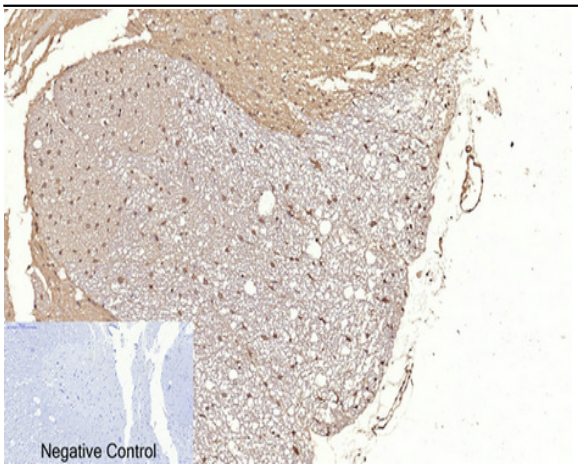
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



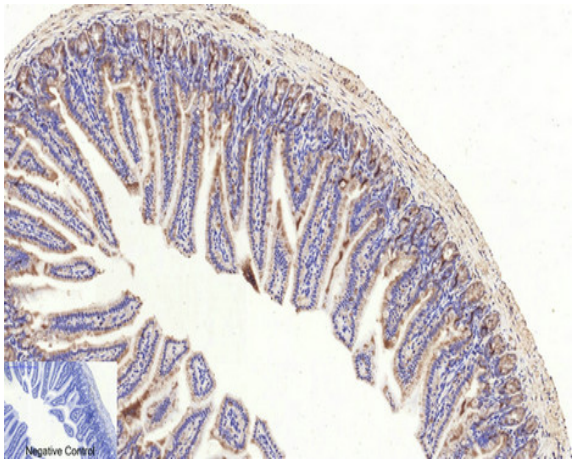
Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



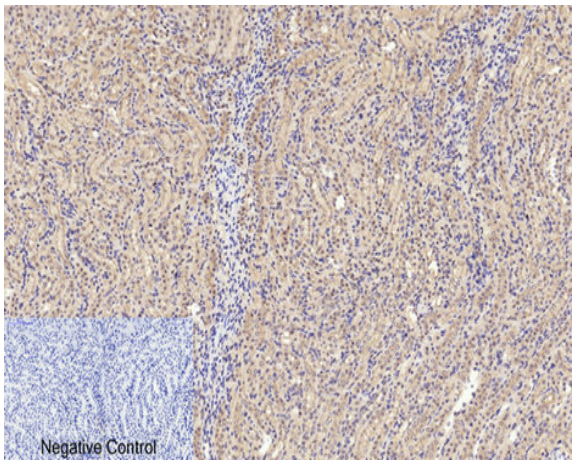
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



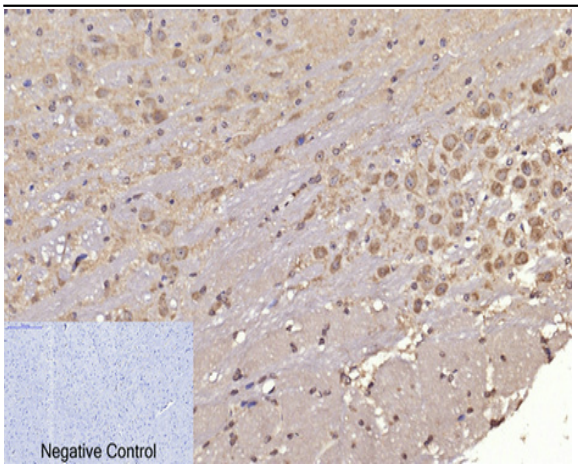
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



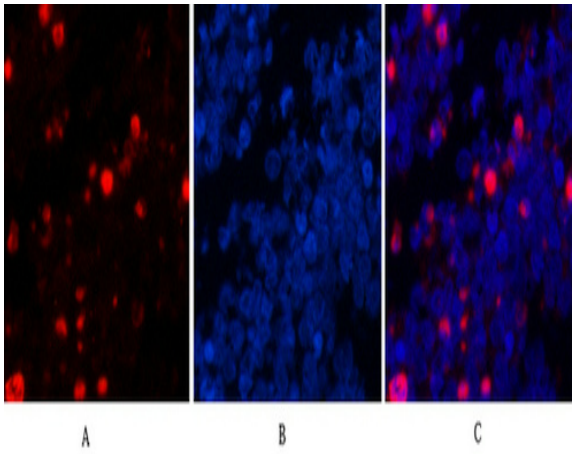
Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



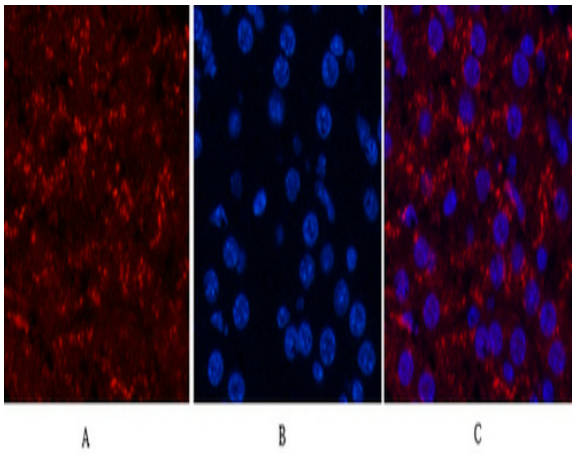
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



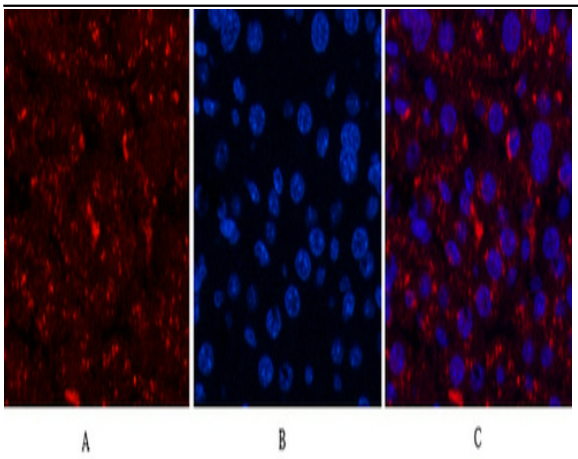
Immunohistochemical analysis of paraffin-embedded Mouse-brain tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-lung-cancer tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled 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-liver tissue. 1,Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled 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



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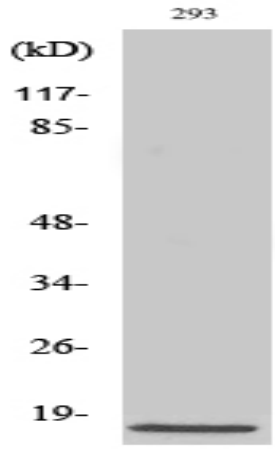

Western Blot analysis of 293 cells using Cleaved-Caspase-3 p17 (D175) Polyclonal Antibody