

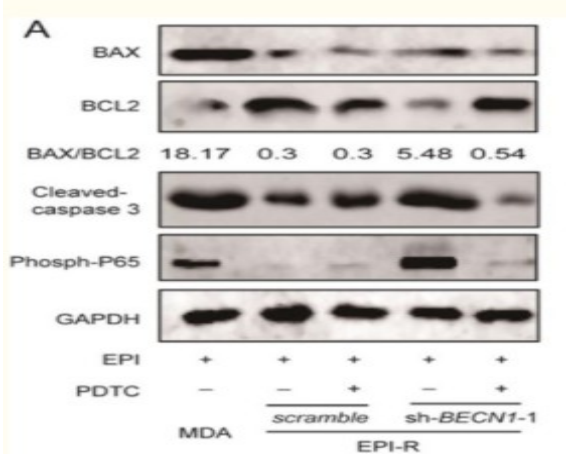
Cleaved-Caspase-3 p12 (D175) Polyclonal Antibody

Catalog No :	YC0004
Reactivity :	Human;Rat;Mouse;
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 Swiss Prot No :	P70677
Immunogen :	The antiserum was produced against synthesized peptide derived from human Caspase 3. AA range:157-206
Specificity :	Cleaved-Caspase-3 p12 (D175) Polyclonal Antibody detects endogenous levels of fragment of activated Caspase-3 p12 protein resulting from cleavage adjacent to D175.

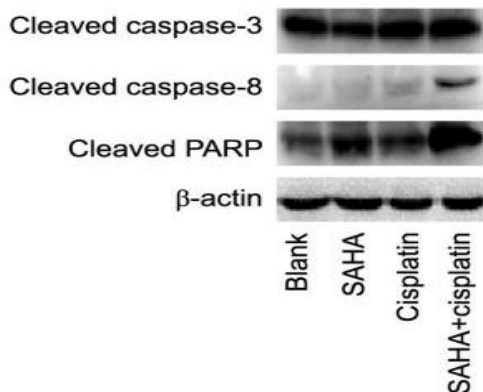
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000, IHC 1:50-300, IF 1:50-300
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	12 35kD
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.

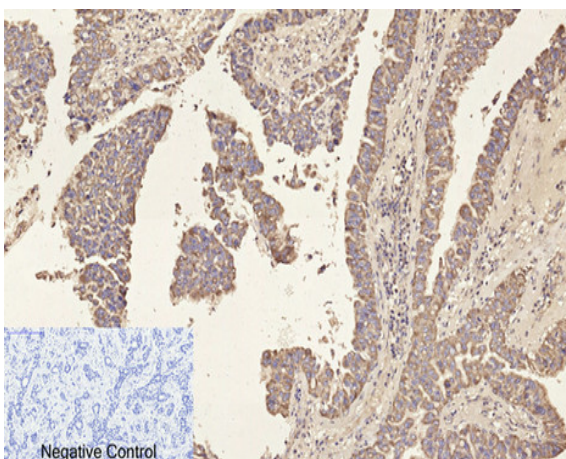
Products Images



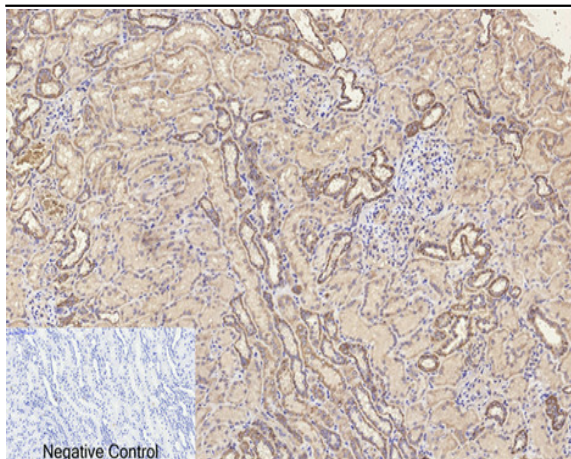
Zhang, Li-han, et al. "Enhanced autophagy reveals vulnerability of P-gp mediated epirubicin resistance in triple negative breast cancer cells." *Apoptosis* 21.4 (2016): 473-488.



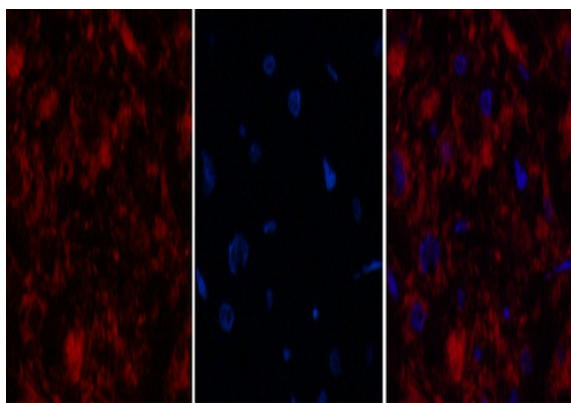
Hou, Mengyi, et al. "Synergistic antitumor effect of suberoylanilide hydroxamic acid and cisplatin in osteosarcoma cells." *Oncology letters* 16.4 (2018): 4663-4670.



Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1, Cleaved-Caspase-3 p12 (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-kidney tissue. 1, Cleaved-Caspase-3 p12 (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.

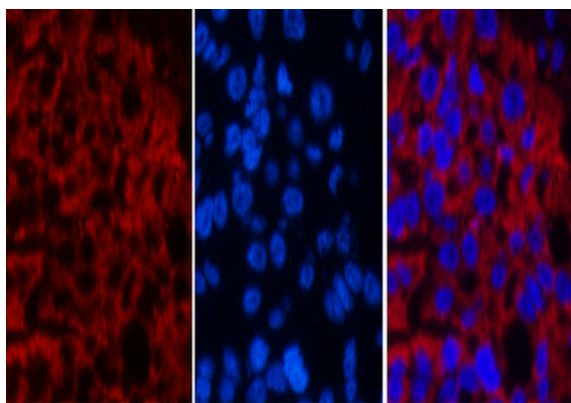


A

B

C

Immunofluorescence analysis of Human-kidney-cancer tissue. 1, Cleaved-Caspase-3 p12 (D175) 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

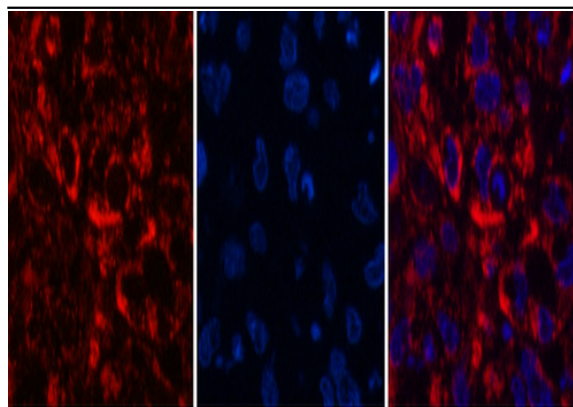


A

B

C

Immunofluorescence analysis of Human-liver-cancer tissue. 1, Cleaved-Caspase-3 p12 (D175) 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

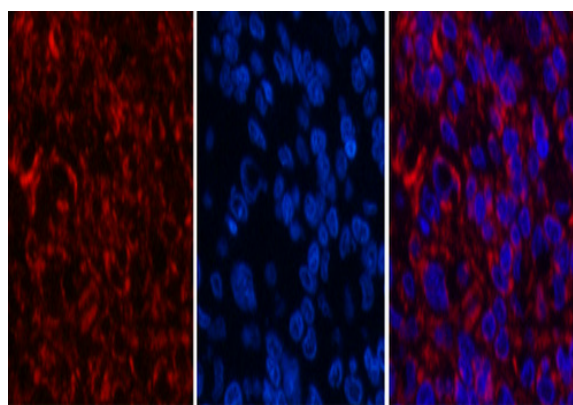


A

B

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Immunofluorescence analysis of Human-lung-cancer tissue. 1, Cleaved-Caspase-3 p12 (D175) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture C: merge of A+B

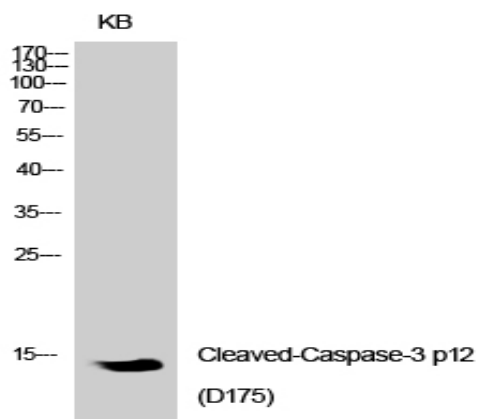


A

B

C

Immunofluorescence analysis of Human-lung-cancer tissue. 1, Cleaved-Caspase-3 p12 (D175) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture C: merge of A+B



Western Blot analysis of KB cells using Cleaved-Caspase-3 p12 (D175) Polyclonal Antibody diluted at 1:1000