

## Caspase-7 Polyclonal Antibody

<b>Catalog No :</b>	YC0032
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Caspase-7
<b>Fields :</b>	>>Apoptosis;>>Apoptosis - multiple species;>>TNF signaling pathway;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Pathways of neurodegeneration - multiple diseases;>>Pathogenic Escherichia coli infection;>>Salmonella infection;>>Pertussis;>>Legionellosis;>>Pathways in cancer;>>Lipid and atherosclerosis
<b>Gene Name :</b>	CASP7
<b>Protein Name :</b>	Caspase7
<b>Human Gene Id :</b>	840
<b>Human Swiss Prot No :</b>	P55210
<b>Mouse Swiss Prot No :</b>	P97864
<b>Immunogen :</b>	Synthesized peptide derived from Caspase-7 . at AA range: 160-240
<b>Specificity :</b>	Caspase-7 Polyclonal Antibody detects endogenous levels of Caspase-7 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000, IF 1:50-300, IHC 1:50-300
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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

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**Observed Band :** 34kD

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**Cell Pathway :** Apoptosis\_Inhibition;Apoptosis\_Mitochondrial;Apoptosis\_Overview;Alzheimer's disease;

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**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. The precursor of the encoded protein is cleaved by caspase 3 and 10, is activated upon cell death stimuli and induces apoptosis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012],

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**Function :** catalytic activity:Strict requirement for an Asp residue at position P1 and has a preferred cleavage sequence of Asp-Glu-Val-Asp-|-,enzyme regulation:Inhibited by isatin sulfonamides.,function:Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|Gly-217' bond. Overexpression promotes programmed cell death.,PTM:Cleavages by granzyme B or caspase-10 generate the two active subunits. Propeptide domains can also be cleaved efficiently by caspase-3. Active heterodimers between the small subunit of caspase-7 and the large subunit of caspase-3, and vice versa, also occur.,similarity:Belongs to the peptidase C14A family.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed

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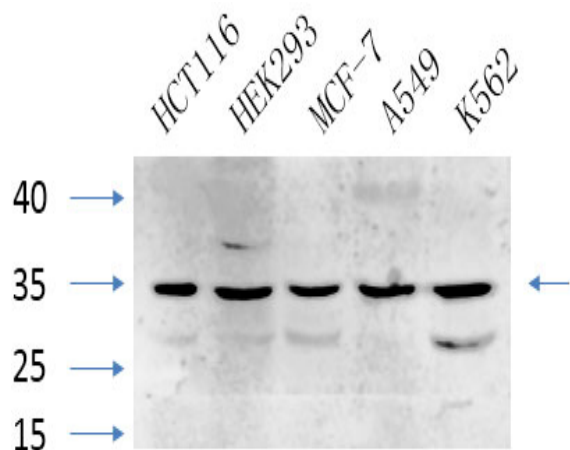
**Subcellular Location :** Cytoplasm.

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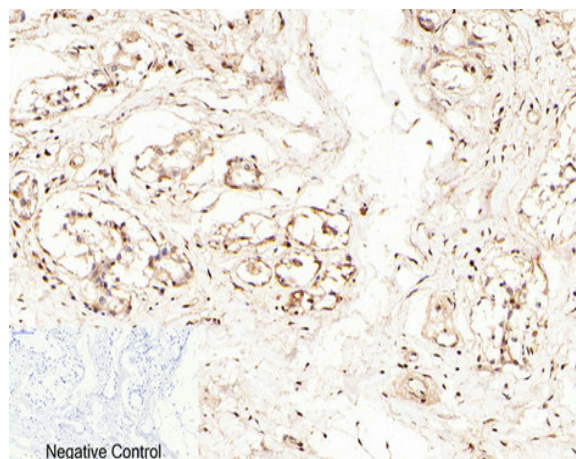
**Expression :** Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain.

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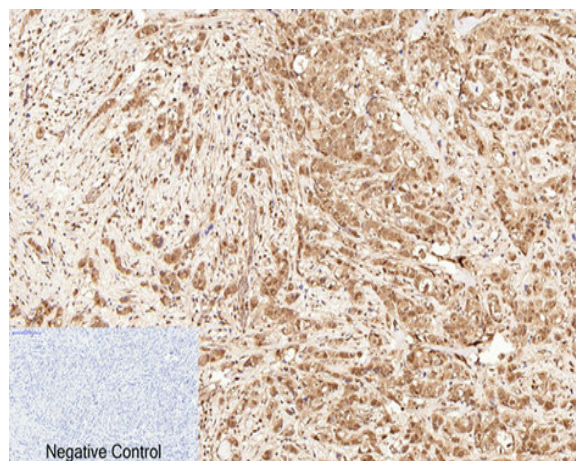
## Products Images



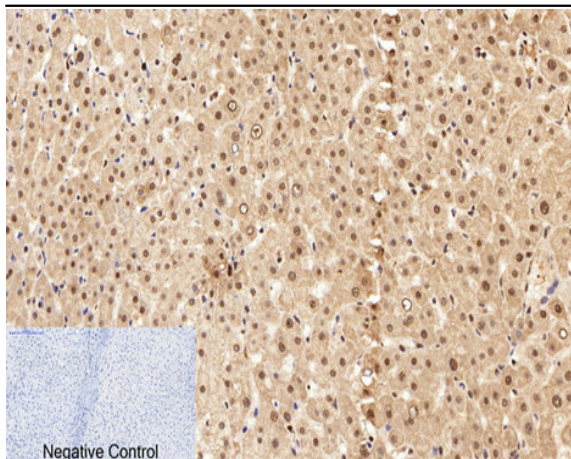
Western Blot analysis of various cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).



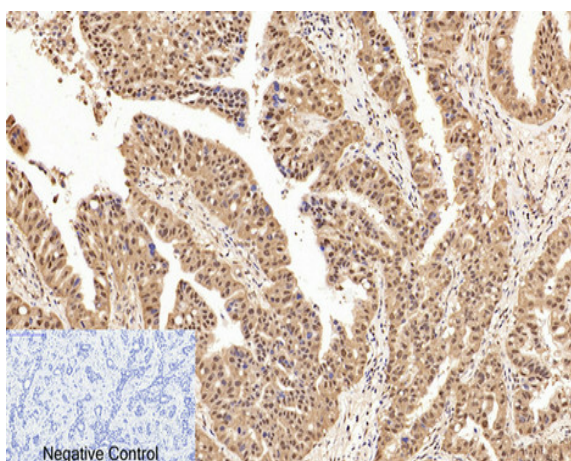
Immunohistochemical analysis of paraffin-embedded Human-breast tissue. 1,Caspase-7 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



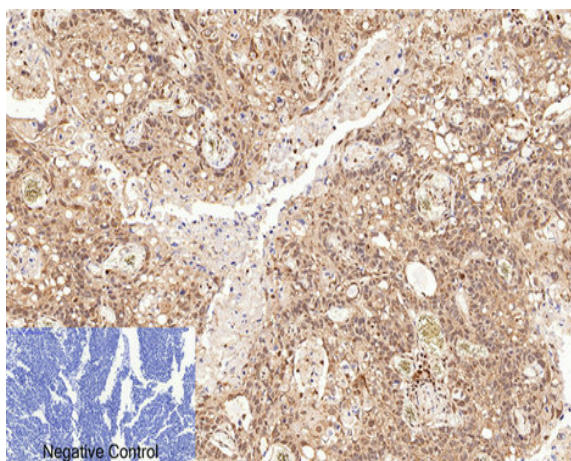
Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,Caspase-7 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



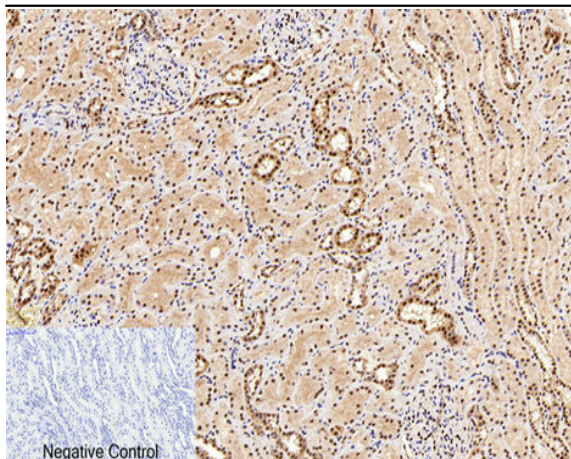
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1, Caspase-7 Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



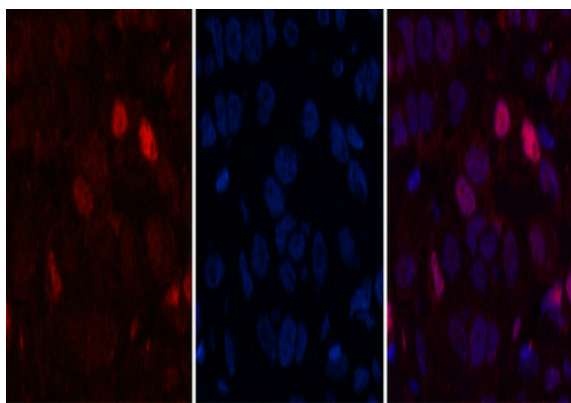
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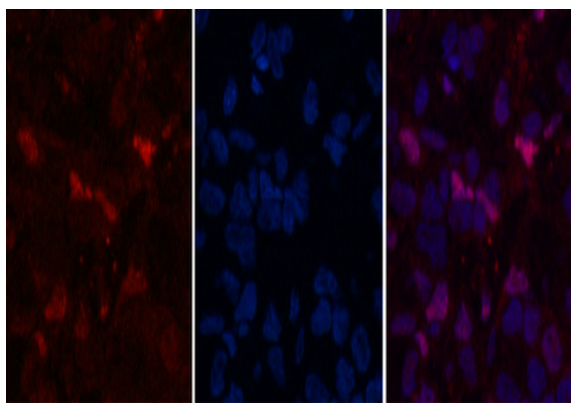
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1, Caspase-7 Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



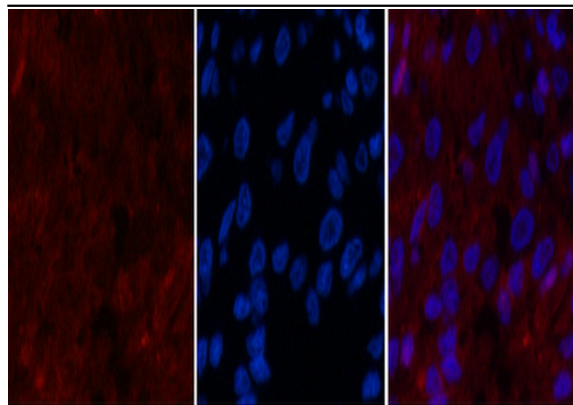
Immunohistochemical analysis of paraffin-embedded Human-kidney tissue. 1, Caspase-7 Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-breast-cancer tissue. 1, Caspase-7 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 C: merge of A+B



Immunofluorescence analysis of Human-breast-cancer tissue. 1, Caspase-7 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 C: merge of A+B

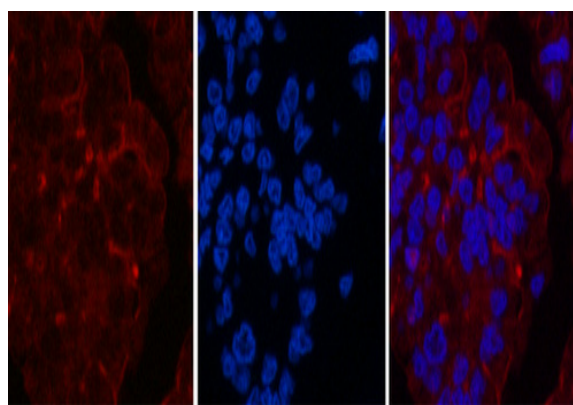


A

B

C

Immunofluorescence analysis of Human-liver-cancer tissue. 1, Caspase-7 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

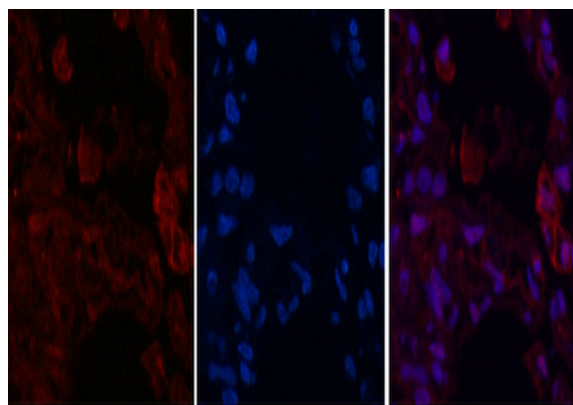


A

B

C

Immunofluorescence analysis of Human-liver-cancer tissue. 1, Caspase-7 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

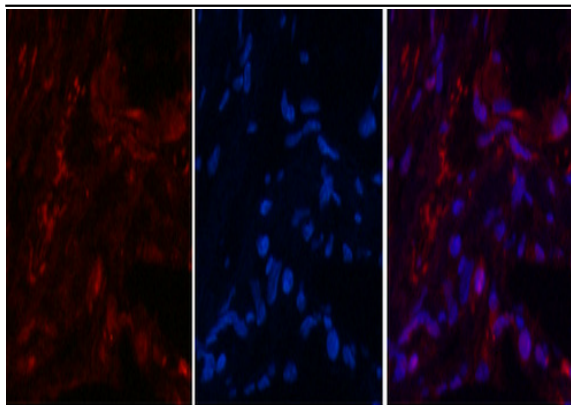


A

B

C

Immunofluorescence analysis of Human-lung tissue. 1, Caspase-7 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-lung tissue.  
1, Caspase-7 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 B: DAPI. Picture C: merge of A+B