

**Caspase-3 (PT0099R) PT® Rabbit mAb**

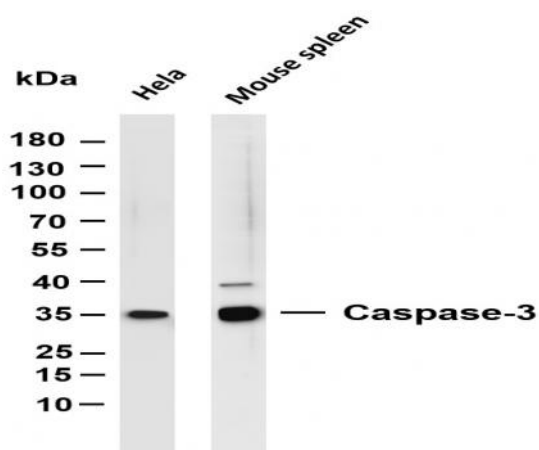
<b>Catalog No :</b>	YM8058
<b>Reactivity :</b>	Human; Mouse; Rat;
<b>Applications :</b>	WB;IHC;IF;IP;ELISA
<b>Target :</b>	Caspase-3
<b>Fields :</b>	>>Platinum drug resistance;>>MAPK signaling pathway;>>p53 signaling pathway;>>Apoptosis;>>Apoptosis - multiple species;>>Natural killer cell mediated cytotoxicity;>>IL-17 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
<b>Gene Name :</b>	CASP3
<b>Protein Name :</b>	Caspase3
<b>Human Gene Id :</b>	836
<b>Human Swiss Prot No :</b>	P42574
<b>Mouse Gene Id :</b>	12367
<b>Mouse Swiss Prot No :</b>	P70677
<b>Rat Gene Id :</b>	25402
<b>Rat Swiss Prot No :</b>	P55213

<b>Specificity :</b>	endogenous
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal, rabbit, IgG, Kappa
<b>Dilution :</b>	IHC 1:200-1000,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
<b>Purification :</b>	Protein A
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	31.6kD
<b>Observed Band :</b>	35kD
<b>Cell Pathway :</b>	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
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular</b>	Cytoplasm

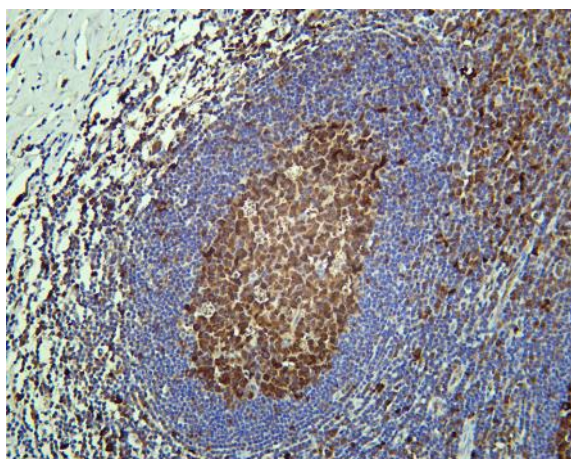
**Expression :**

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.

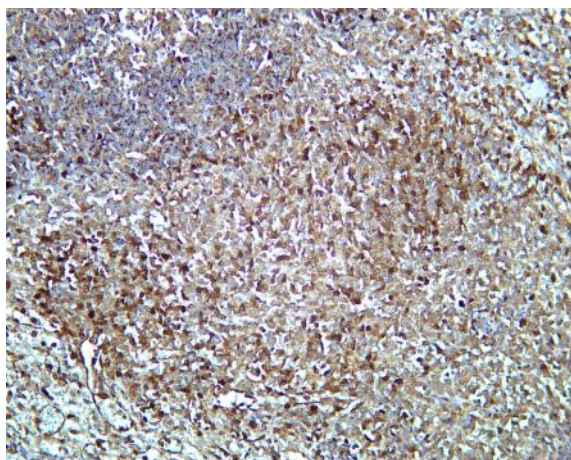
## Products Images



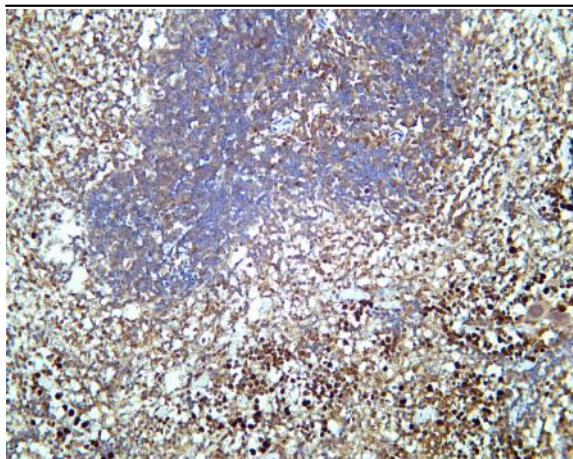
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Caspase-3 (PT0099R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Mouse spleen Predicted band size: 35kDa Observed band size: 35kDa



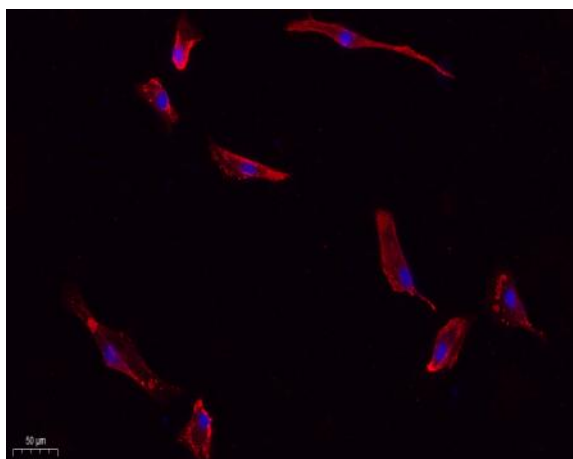
Human tonsil was stained with Anti-Caspase-3 (PT0099R) rabbit antibody



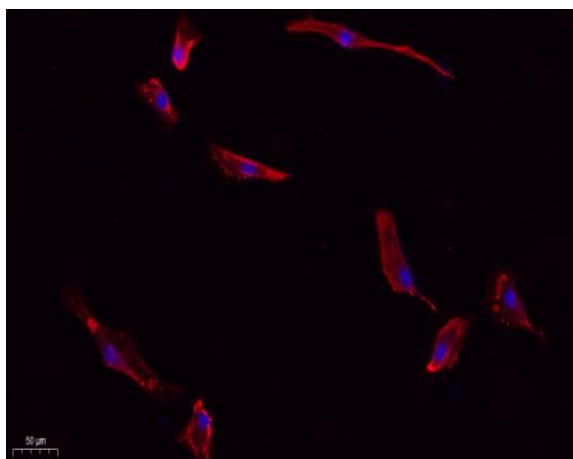
Rat spleen was stained with Anti-Caspase-3 (PT0099R) rabbit antibody



Mouse spleen was stained with Anti-Caspase-3 (PT0099R) rabbit antibody



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



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