

Caspase-3 mouse Monoclonal Antibody(5H10)

Catalog No :	YM3624
Reactivity :	Human;Rat;Mouse
Applications :	WB,IHC-p;IF(paraffin section)
Gene Name :	CASP3
Protein Name :	Caspase3
Human Gene Id :	836
Human Swiss Prot No :	P42574
Mouse Swiss Prot No :	P70677
Rat Swiss Prot No :	P55213
Immunogen :	Synthetic Peptide of Caspase-3 at AA range of 20-100
Specificity :	Caspase-3 protein detects endogenous levels of CASP3
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB: 500-2000 IHC 1:100-200
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-20°C/1 year
Observed Band :	17[?]32

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

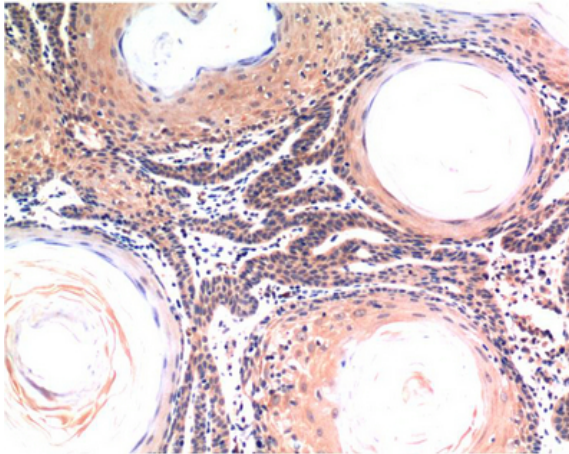
Background : This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved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

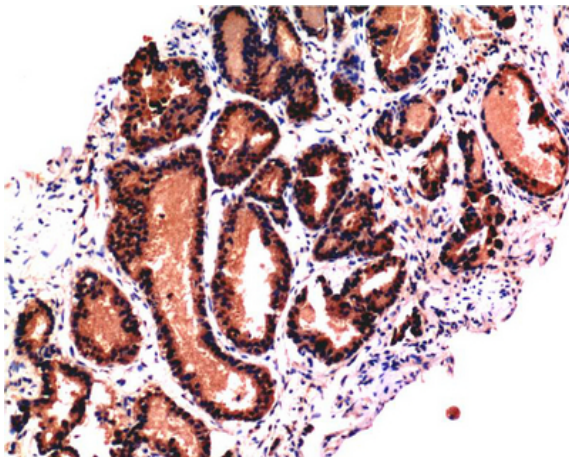
Subcellular Location : Cytoplasm.

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.

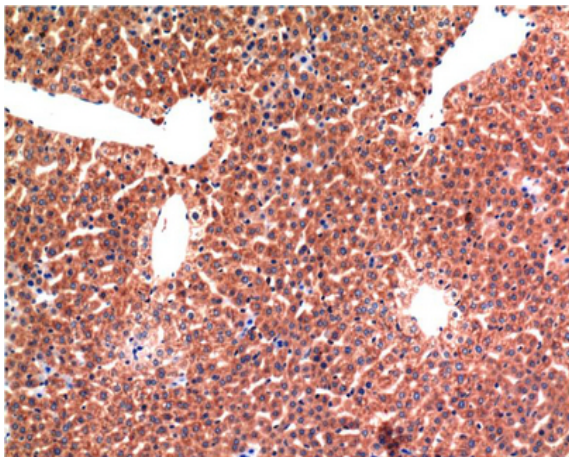
Products Images



Immunohistochemical analysis of paraffin-embedded Human Skin Tissue using Caspase-3 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Prostate Tissue using Caspase-3 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse Liver Tissue using Caspase-3 Mouse mAb diluted at 1:200.