



Caspase-3 Polyclonal Antibody

Catalog No	YP-Ab-00345
Isotype	IgG
Reactivity	Human;Mouse;Rat;Fish
Applications	WB;IHC;IF;ELISA
Gene Name	CASP3
Protein Name	Caspase3
Immunogen	The antiserum was produced against synthesized peptide derived from human Caspase 3. AA range:116-165
Specificity	Caspase-3 Polyclonal Antibody detects endogenous levels of Caspase-3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300 Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CASP3; CPP32; Caspase-3; CASP-3; Apopain; Cysteine protease CPP32; CPP-32; Protein Yama; SREBP cleavage activity 1; SCA-1
Observed Band	35kD
Cell Pathway	Cytoplasm.
Tissue Specificity	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.
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



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],

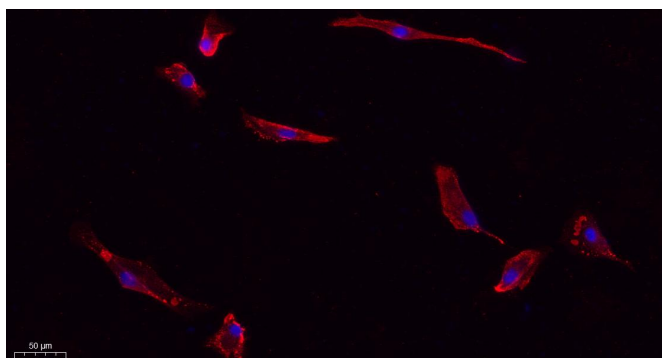
matters needing attention

Avoid repeated freezing and thawing!

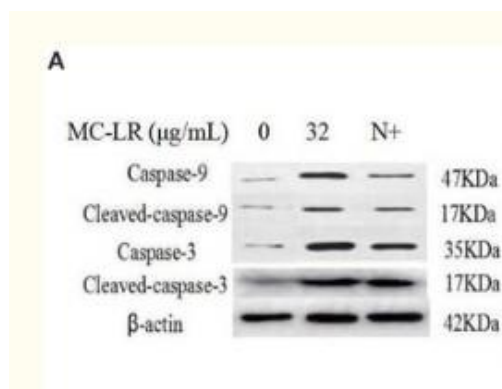
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

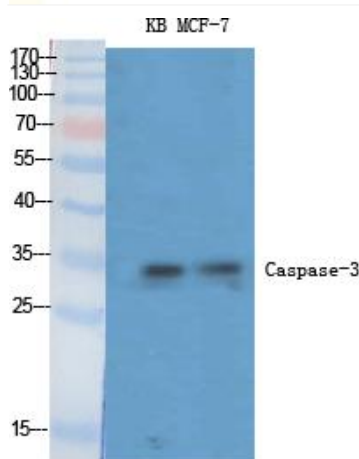
Products Images



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.



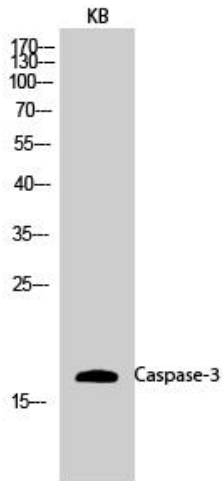
Huang, Hui, et al. "Microcystin-LR Induced Apoptosis in Rat Sertoli Cells via the Mitochondrial Caspase-Dependent Pathway: Role of Reactive Oxygen Species." *Frontiers in physiology* 7 (2016): 397.



Western Blot analysis of various cells using Caspase-3 Polyclonal Antibody diluted at 1:1000



Western Blot analysis of KB cells using Caspase-3
Polyclonal Antibody diluted at 1:1000



Western blot analysis of Hela KB 293T 3T3 lysis using
Caspase-3 antibody. Antibody was diluted at 1:1000

