

Basic Information

Product Name	Anti-Caspase 3/CASP3 (p12) Antibody	
Gene Name	CASP3	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1mg BSA	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Caspase-3(P10)(220-236aa CAMLKQYADKLEFMHIL).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	35KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry in fixed cells(ICC): 1:50-400 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Caspase 3 is a caspase protein which interacts with Survivin, XIAP, CFLAR, Caspase 8, HCLS1, Deleted in Colorectal Cancer, TRAF3 and GroEL. This gene which is located at 4q35 encodes a protein that 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 that 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. And the caspase-3 activation in heart failure sequentially cleaves SRF and generates a truncated SRF that appears to function as a dominant-negative transcription factor. Additionally, the caspase-3 influence on bone mineral density should be considered in any in vivo application of caspase-3 inhibitors to the treatment of human disease. In erythroid precursors undergoing terminal differentiation, Hsp70 prevents active CASP3 from cleaving GATA1 and inducing apoptosis.

Reference

Anti-Caspase 3/CASP3 (p12) Antibody被引用在4文献中。

Selected Validation Data

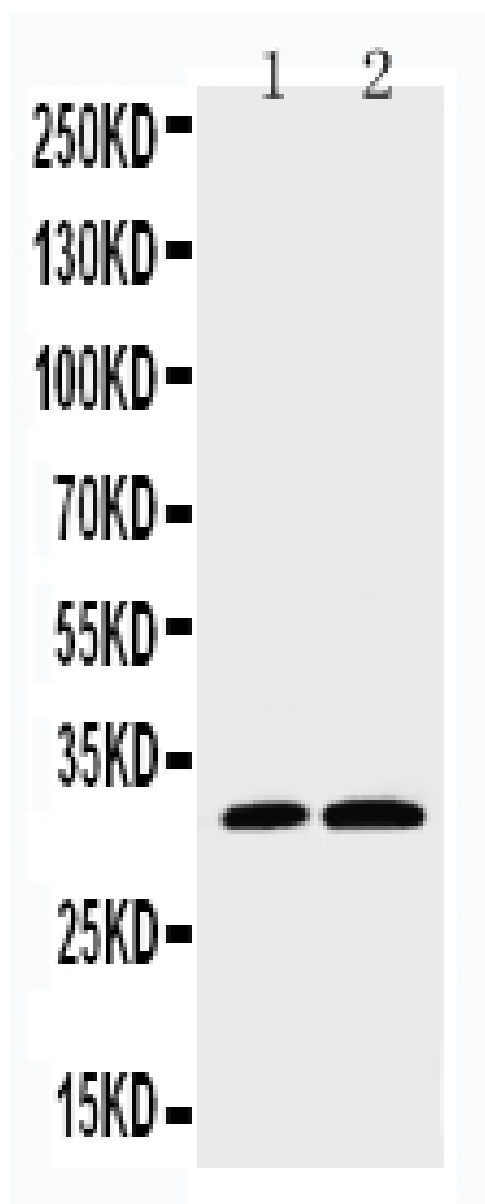


Figure 1. Western blot analysis of anti- CASP3(P12) antibody (BA3592). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: Hela whole cell lysates,

Lane 2: SMMC whole cell lysates.

Use rabbit anti- CASP3(P12) 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for CASP3(P12) at approximately 35KD. The expected band size for CASP3(P12) is at 32KD.

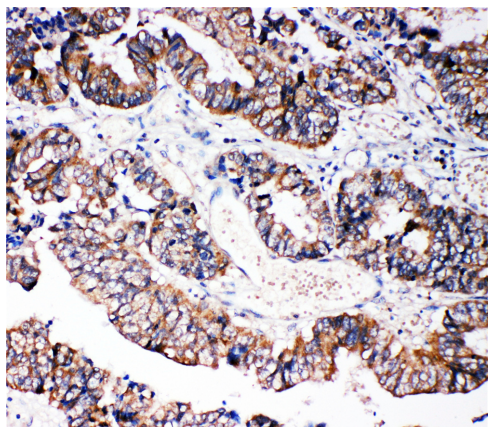


Figure 2. IHC analysis using anti- CASP3(P12) antibody (BA3592). detected in paraffin-embedded section of human Intestinal cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

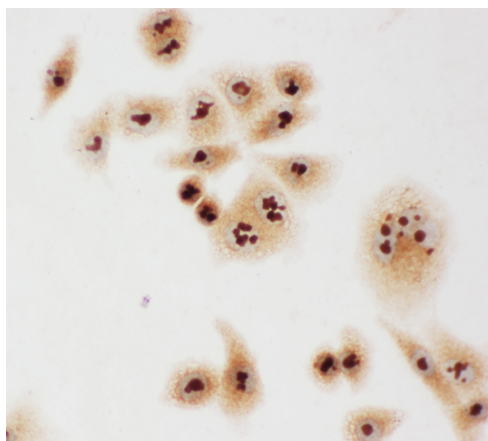


Figure 4. ICC analysis of Caspase-3(P10) using anti-Caspase-3(P10) antibody (BA3592). Caspase-3(P10) was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1 μ g/ml rabbit anti-Caspase-3(P10) Antibody (BA3592) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.