Product datasheet

Anti-Caspase 3/CASP3 (p12) Antibody

Catalog Number: *BA2142*

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Basic Information

Product Name	Anti-Caspase 3/CASP3 (p12) Antibody
Gene Name	CASP3
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminal of human Caspase 3, identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	35 kDa,(cleaved)20/17/12 kDa
Dilution Ratios	Western blot (WB):1:500-2000

Storage

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

Background Information

Caspase 3(caspase 3, apoptosis-related cysteine peptidase) is a caspase protein that interacts with caspase 8 and caspase 9, also known as Caspase-3, PARP CLEAVAGE PROTEASE, APOPAIN, CPP32, CPP32B, YAMA. It is a member of the cysteine-aspartic acid protease(caspase) family. PCR analysis of 16 human tissues revealed expression of full-length CASP3, as well as CASP3s at somewhat lower levels, in all tissues tested. Western blot analysis of 3 cell lines revealed the prominent CASP3 band at 32 kD and CASP3s at 20 kD. Several human cancer cell lines showed coexpression of both variants at the mRNA and protein levels. Overexpression of the catalytically inactive CASP3s by human kidney cells offered some resistance to inducers of apoptosis, and CASP3s accumulation could be enhanced with addition of proteasome inhibitors. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Alternative splicing of this gene results in two transcript variants that encode the same protein. Encoded by the CASP3 gene, CASP3 orthologs have been identified in numerous mammals for which complete genome data are available. Unique orthologs are also present in birds, lizards, lissamphibians,

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and teleosts. Nicholson et al. developed a potent peptide aldehyde inhibitor and showed that it prevented apoptotic events in vitro, suggesting that apopain/CPP32 is important for the initiation of apoptotic cell death.

Reference

Anti-Caspase 3/CASP3 (p12) Antibody被引用在153文献中。

Selected Validation Data

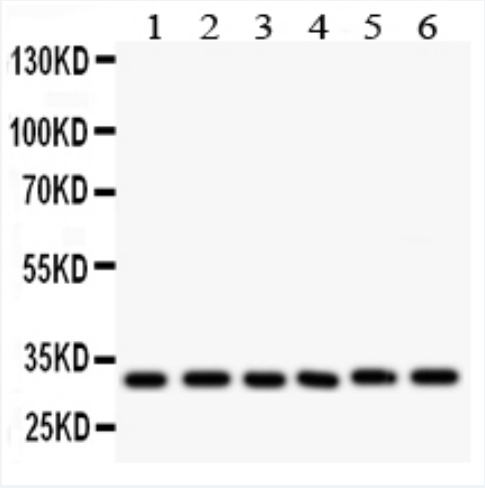

Figure 1. Western blot analysis of Caspase 3/CASP3 (p12) using anti-Caspase 3/CASP3 (p12) antibody (BA2142). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: Rat cardiac muscle tissue lysates,
Lane 2: Rat liver tissue lysates,
Lane 3: Rat thymus tissue lysates,
Lane 4: MCF-7 whole cell lysates,
Lane 5: SMMC whole cell lysates,
Lane 6: HT1080 whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Caspase 3/CASP3 (p12) antigen affinity purified polyclonal antibody (BA2142) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Caspase 3/CASP3 (p12) at approximately 35 kDa,(cleaved)20/17/12 kDa. The expected band size for Caspase 3/CASP3 (p12) is at 32 kDa.