

## Basic Information

<b>Product Name</b>	Anti-Caspase 3/CASP3 (p12) Antibody
<b>Gene Name</b>	CASP3
<b>Source</b>	Rabbit
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB
<b>Contents</b>	500 ug/ml antibody with PBS , 0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 1 mg BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminal of human Caspase 3(207-220aa RNSKDGSWFIQSLC), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
<b>concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	35KD
<b>Dilution Ratios</b>	Western blot(WB):1:500-2000

## 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(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, 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112文献中。

## Selected Validation Data



Figure 1. Western blot analysis of Anti-CASP3(P12) antibody (BA2142). The sample well of each lane was loaded with 50ug 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, 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 31KD.