



# Cleaved Caspase-3(Asp175) Rabbit mAb

<b>Catalog No</b>	YP-rAb-17796
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IHC,IF,IP,ELISA
<b>Gene Name</b>	CASP3
<b>Protein Name</b>	Caspase3
<b>Purification Process</b>	Protein A
<b>Specificity</b>	This antibody detects endogenous levels of Cleaved Caspase-3 (Asp175).
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:200-1:1000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	CASP3 ; CPP32 ; Caspase-3 ; CASP-3 ; Apopain ; Cysteine protease CPP32 ; CPP-32 ; Protein Yama ; SREBP cleavage activity 1 ; SCA-1
<b>Observed Band</b>	35kd(Full Length),19kd(p19),17kd(p17)
<b>Calculated Molecular Weight</b>	17kD,19kD,25KD
<b>Cell Pathway</b>	Cytoplasm
<b>Tissue Specificity</b>	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.
<b>Function</b>	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. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa. PTM: S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol. Similarity: Belongs to the peptidase C14A family. Subunit: Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 17 kDa (p17) and a 12 kDa (p12) subunit. 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.

## Background

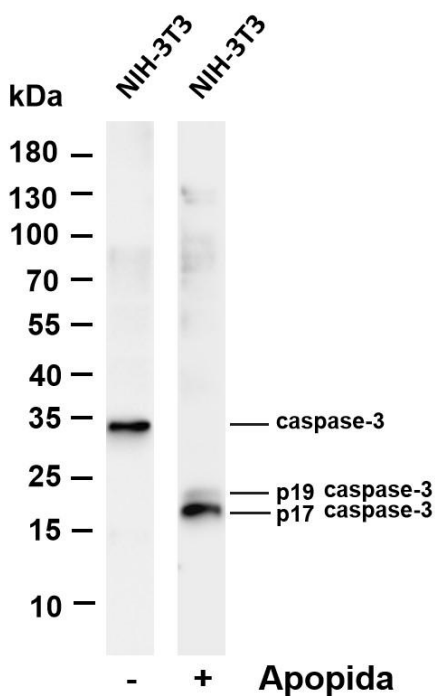
This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues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

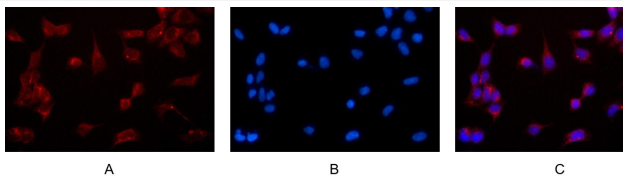
Avoid repeated freezing and thawing!

## Usage suggestions

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cleaved Caspase-3 (Asp175) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: NIH-3T3 Lane 2: NIH-3T3 treated with Apopida Predicted band size: 17,19kDa Observed band size: 17,19kDa



Immunofluorescence analysis of HEK293. Picture A: Cleaved Caspase-3 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

## 杭州臻优品生物科技有限公司

### 热销产品:

蛋白、一抗、抗体对、ELISA试剂盒、生化试剂盒  
CCK8试剂盒、QPCR检测试剂盒

### 检测服务:

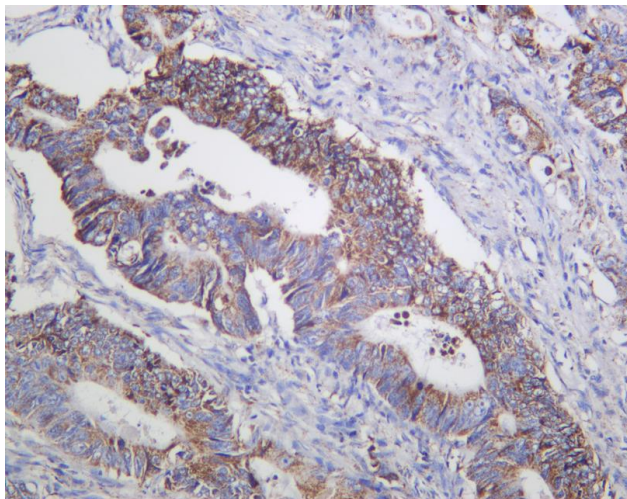
ELISA检测及定制服务 | 生化检测 | PCR、QPCR检测 | WB检测  
ICO-IP检测 | 切片 | 染色 | 免疫组化 | 免疫荧光 | 透射电镜全套  
| 宏基因组、转录组、基因组、蛋白组、代谢组测序



关注官网



关注客服



Human colon carcinoma was stained with anti-Cleaved Caspase-3 (Asp175) Rabbit antibody

## 杭州臻优品生物科技有限公司

### 热销产品:

蛋白、一抗、抗体对、ELISA试剂盒、生化试剂盒  
CCK8试剂盒、QPCR检测试剂盒

### 检测服务:

ELISA检测及定制服务 | 生化检测 | PCR、QPCR检测 | WB检测  
ICO-IP检测 | 切片 | 染色 | 免疫组化 | 免疫荧光 | 透射电镜全套  
| 宏基因组、转录组、基因组、蛋白组、代谢组测序



关注官网



关注客服