

# CASP3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11324b

# **Specification**

#### CASP3 Antibody (C-term) - Product Information

Application WB, IHC-P, FC,E

Primary Accession P42574

Other Accession <u>P55213</u>, <u>Q8MJC3</u>,

P70677, Q2PFV2, NP\_004337.2, NP\_116786.1

Reactivity Human

Predicted Monkey, Mouse,

Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Calculated MW 31608
Antigen Region 219-248

CASP3 Antibody (C-term) - Additional Information

### Gene ID 836

#### **Other Names**

Caspase-3, CASP-3, Apopain, Cysteine protease CPP32, CPP-32, Protein Yama, SREBP cleavage activity 1, SCA-1, Caspase-3 subunit p17, Caspase-3 subunit p12, CASP3, CPP32

## **Target/Specificity**

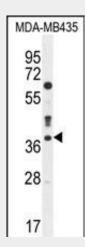
This CASP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 219-248 amino acids from the C-terminal region of human CASP3.

## **Dilution**

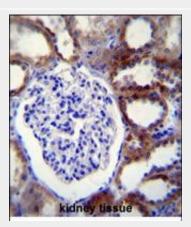
WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

# **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.



CASP3 Antibody (C-term) (Cat. #AP11324b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the CASP3 antibody detected the CASP3 protein (arrow).



CASP3 Antibody (C-term) (Cat. #AP11324b)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CASP3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



# **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CASP3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CASP3 Antibody (C-term) - Protein Information

#### Name CASP3

## Synonyms CPP32

#### **Function**

Involved in the activation cascade of caspases responsible for apoptosis execution (PubMed:<a href="http://www.un iprot.org/citations/7596430" target=" blank">7596430</a>). At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216- Asp-|-Gly-217' bond (PubMed:<a href ="http://www.uniprot.org/citations/7774019 " target="\_blank">7774019</a>). 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 (PubMed:<a href="http://www.uniprot.org/c itations/7596430"

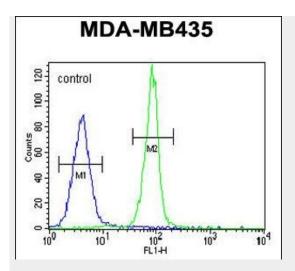
target="\_blank">7596430</a>). Involved in the cleavage of huntingtin (PubMed:<a hr ef="http://www.uniprot.org/citations/8696339" target="\_blank">8696339</a>). Triggers cell adhesion in sympathetic neurons through RET cleavage (PubMed:<a href="http://www.uniprot.org/citations/21357690" target="\_blank">21357690</a>). Cleaves and inhibits serine/threonine-protein kinase AKT1 in

response to oxidative stress (PubMed:<a hr ef="http://www.uniprot.org/citations/23152800" target="\_blank">23152800</a>).

# Cellular Location Cytoplasm.

## **Tissue Location**

Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also



CASP3 Antibody (C-term) (Cat. #AP11324b) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CASP3 Antibody (C-term) - 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].

## CASP3 Antibody (C-term) - References

Wurstle, M.L., et al. J. Biol. Chem. 285(43):33209-33218(2010)



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found in many cell lines, highest expression in cells of the immune system

# CASP3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# CASP3 Antibody (C-term) - Citations

• Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.

Srikanth, C.V., et al. Science 330(6002):390-393(2010) Burke, S.P., et al. J. Biol. Chem. 285(39):30061-30068(2010) Chen, W., et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 26(7):673-674(2010) Bellini, M.F., et al. Anticancer Res. 30(7):2845-2849(2010)