

**Caspase-3 (CASP3) Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP7563c****Specification****Caspase-3 (CASP3) Antibody (Center) Blocking peptide - Product Information**Primary Accession [P42574](#)**Caspase-3 (CASP3) Antibody (Center) Blocking peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP7563c](/product/products/AP7563c) was selected from the Center region of human CASP3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Caspase-3 (CASP3) Antibody (Center) Blocking peptide - Protein Information****Caspase-3 (CASP3) Antibody (Center) Blocking peptide - Background**

CASP3 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.

**Caspase-3 (CASP3) Antibody (Center) Blocking peptide - References**

Wright,M.H.,Biochem. Biophys. Res. Commun. 369 (2), 478-484 (2008)Brown,E.T.,Radiat. Res. 169 (5), 595-601 (2008)Mustafa,T.,Virchows Arch. 452 (4), 449-456 (2008)

**Name** CASP3**Synonyms** CPP32**Function**

Involved in the activation cascade of caspases responsible for apoptosis execution (PubMed:<a href="http://www.uniprot.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/citations/7596430" target="\_blank">7596430</a>). Involved in the cleavage of huntingtin (PubMed:<a href="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 href="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 found in many cell lines, highest expression in cells of the immune system

**Caspase-3 (CASP3) Antibody (Center)  
Blocking peptide - Protocols**

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

- [Blocking Peptides](#)