10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS18301

Specification

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) - Product Information

Application	**WB, IHC, IHC-P**
Primary Accession	P42574
Predicted	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,k**
Calculated MW	**31608**

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) - Additional Information

Gene ID 836

Alias Symbol	**CASP3**

Other Names
CASP3, Apopain, CASP-3, Caspase-3, CPP32B, CPP32, Cysteine protease CPP32, SCA-1, SREBP cleavage activity 1, Yama, Procaspase3, Caspase 3, CPP-32, PARP cleavage protease, Protein Yama

Target/Specificity
Caspase-3 (Pro and Active)

Reconstitution & Storage
Purified

Precautions
Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) - Protein Information

Name CASP3

Synonyms CPP32 {ECO:0000303|PubMed:7983002}

Function
Thiol protease that acts as a major effector caspase involved in the execution phase of apoptosis (PubMed:7596430, PubMed:18723680, PubMed:20566630, PubMed:23650375, PubMed:35338844, PubMed:35446120).

Following cleavage and activation by initiator caspases (CASP8, CASP9 and/or CASP10), mediates execution of apoptosis by catalyzing cleavage of many proteins (PubMed:7596430, PubMed:18723680, PubMed:20566630, PubMed:23650375). At the onset of apoptosis, it proteolytically cleaves poly(ADP-ribose) polymerase PARP1 at a '216-Asp-|-Gly-217' bond (PubMed:7774019, PubMed:7596430, PubMed:10497198, PubMed:16374543). Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain (By similarity). Cleaves and activates caspase-6, -7 and -9 (PubMed:7596430). Involved in the cleavage of huntingtin (PubMed:8696339). Triggers cell adhesion in sympathetic neurons through RET cleavage (PubMed:21357690). Cleaves and inhibits serine/threonine-protein kinase AKT1 in response to oxidative stress (PubMed:23152800). Acts as an inhibitor of type I interferon production during virus-induced apoptosis by mediating cleavage of antiviral proteins CGAS, IRF3 and MAVS, thereby preventing cytokine overproduction (PubMed:30878284). Also involved in pyroptosis by mediating cleavage and activation of gasdermin-E (GSDME) (PubMed:35446120, PubMed:35338844). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:23845944, PubMed:33725486).

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.

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CASP3 / Caspase 3 Antibody (clone ABM1C12) - Images