

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: [18723680](http://www.uniprot.org/citations/18723680), PubMed: [20566630](http://www.uniprot.org/citations/20566630), PubMed: [23650375](http://www.uniprot.org/citations/23650375), PubMed: [35338844](http://www.uniprot.org/citations/35338844), PubMed: [35446120](http://www.uniprot.org/citations/35446120), PubMed: [7596430](http://www.uniprot.org/citations/7596430)).

Following cleavage and activation by initiator caspases (CASP8, CASP9 and/or CASP10), mediates execution of apoptosis by catalyzing cleavage of many proteins (PubMed:18723680, PubMed:20566630, PubMed:23650375, PubMed:7596430). At the onset of apoptosis, it proteolytically cleaves poly(ADP-ribose) polymerase PARP1 at a '216-Asp-|-Gly-217' bond (PubMed:10497198, PubMed:16374543, PubMed:7596430, PubMed:7774019). 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 (CASP6, CASP7 and CASP9, respectively) (PubMed:7596430). Cleaves and inactivates interleukin-18 (IL18) (PubMed:37993714, PubMed:9334240). 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:35338844, PubMed:35446120). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:23845944, PubMed:33725486). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (PubMed:36758104, PubMed:36758106).

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 Cytometry](#)
- [Cell Culture](#)

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