Product Name: active Caspase-3 (2M18) Rabbit Monoclonal Antibody
Catalog #: AMRe06554

Summary

Production Name	active Caspase-3 (2M18) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IHC-F,ICC/IF,IF-P,IF-F
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	CASP3
Alternative Names	Apopain precursor; Cysteine protease CPP32; ICE3; CASP-3; CPP32; Caspase-3; SCA-1;
Gene ID	836.0
SwissProt ID	P42574.

Application

Dilution Ratio	WB 1:1000-1:2000,IHC-P/IHC-F 1:100-1:200,ICC/IF 1:50-1:200,IF-P/IF-F 1:50-1:200
Molecular Weight	32kDa

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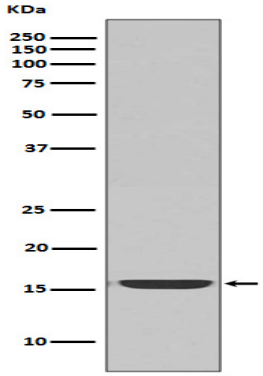
Background

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 2 subunits, large and small, that dimerize to form the active enzyme. Involved in the activation cascade of caspases responsible for apoptosis execution (PubMed:7596430). At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216- Asp-|-Gly-217' bond (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. 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). Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface (PubMed:23845944, PubMed:33725486).

Research Area

Image Data



Western blot analysis of active Caspase-3 expression in Jurkat cell lysate treated with Camptothecin.

Note

For research use only.

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