

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

For research use only.

**Summary**

<b>Description</b>	Recombinant rabbit monoclonal antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	0.5mg/ml. The concentration of this product may be batch-dependent.
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	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.
<b>Purification</b>	Affinity purification

**Application**

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

**Antigen Information**

<b>Gene Name</b>	CASP3
<b>Alternative Names</b>	Apopain precursor; Cysteine protease CPP32; ICE3; CASP-3; CPP32; Caspase-3; SCA-1;
<b>Gene ID</b>	836.0
<b>SwissProt ID</b>	P42574
<b>Immunogen</b>	Recombinant protein of human Caspase-3

**Background**

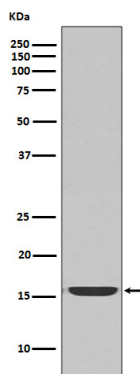
Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive

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

Cell Biology

## Image Data



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