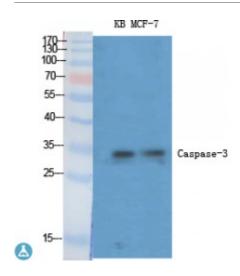


Anti-Caspase-3 antibody



Description Rabbit polyclonal to Caspase-3.

Model STJ92021

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human Caspase-3 around the non-

phosphorylation site of S150.

Immunogen Region 90-170 aa

Gene ID <u>836</u>

Gene Symbol CASP3

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity Caspase-3 Polyclonal Antibody detects endogenous levels of Caspase-3

protein.

Tissue Specificity 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.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name 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

Molecular Weight 17 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:1504OMIM:600636

Alternative 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

Function Involved in the activation cascade of caspases responsible for apoptosis

execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|-Gly-217' bond. 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. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET

cleavage.

Cellular Localization Cytoplasm.

Post-translational Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Additional processing of the properties is likely due to

the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa.; S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating

the denitrosylation of its active site thiol.