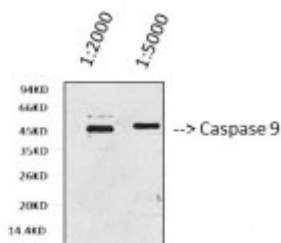


Anti-Caspase 9 antibody



Western Blot (WB) analysis of HELA cells using Caspase 9 Monoclonal Antibody diluted at 1:2000, 1:5000. (STJ96979)



Description

Caspase-9 is a protein encoded by the CASP9 gene which is approximately 46,2 kDa. Caspase-9 is localised to the cytosol, mitochondrion and nucleus. It is involved in the TNFR1 pathway, RET signalling and apoptosis modulation and signalling. Caspase-9 exist as an inactive proenzyme which undergoes proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. It is involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Caspase-9 is ubiquitously expressed with highest expression in the heart. Mutations in the CASP9 gene may result in cerebral hypoxia and cervical cancer. STJ96979 was affinity purified. This monoclonal antibody binds endogenous caspase-9.

Model	STJ96979
Host	Mouse
Reactivity	Avian, Human, Mouse, Rat
Applications	IP, WB
Immunogen	Synthetic Peptide
Gene ID	842
Gene Symbol	CASP9
Dilution range	WB 1:1000-5000IP 1:200
Specificity	The antibody detects endogenous Caspase 9 protein.
Tissue Specificity	Ubiquitous, with highest expression in the heart, moderate expression in liver,

skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Clone ID	43891
Note	For Research Use Only (RUO).
Protein Name	Caspase-9 CASP-9 Apoptotic protease Mch-6 Apoptotic protease-activating factor 3 APAF-3 ICE-like apoptotic protease 6 ICE-LAP6 Caspase-9 subunit p35 Caspase-9 subunit p10
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1511OMIM:602234
Alternative Names	Caspase-9 CASP-9 Apoptotic protease Mch-6 Apoptotic protease-activating factor 3 APAF-3 ICE-like apoptotic protease 6 ICE-LAP6 Caspase-9 subunit p35 Caspase-9 subunit p10
Function	Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Promotes DNA damage-induced apoptosis in a ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP).; Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9.
Post-translational Modifications	Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and -10 can also be involved in these processing events.; Phosphorylated at Thr-125 by MAPK1/ERK2. Phosphorylation at Thr-125 is sufficient to block caspase-9 processing and subsequent caspase-3 activation. Phosphorylation on Tyr-153 by ABL1/c-Abl; occurs in the response of cells to DNA damage.