



Caspase-9 mouse mAb

Catalog No	YP-Ab-00099
Isotype	IgG
Reactivity	Human;Transfected
Applications	WB
Gene Name	casp9
Protein Name	Caspase9
Immunogen	Purified recombinant human Caspase-9 protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of Caspase-9 and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb dilution 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	APAF 3;APAF-3;APAF3;Apoptosis related cysteine peptidase;Apoptotic protease activating factor 3;Apoptotic protease Mch 6;Apoptotic protease Mch-6;Apoptotic protease-activating factor 3;CASP 9;CASP-9;CASP9;CASP9_HUMAN;Caspase 9 apoptosis related cysteine peptidase;Caspase 9 Dominant Negative;Caspase 9c;Caspase-9;Caspase-9 subunit p10;Caspase9;ICE LAP6;ICE like apoptotic protease 6;ICE-LAP6;ICE-like apoptotic protease 6;MCH6;PPP1R56;protein phosphatase 1, regulatory subunit 56;RNCASP9
Observed Band	35 46kD
Cell Pathway	nucleus,mitochondrion,cytosol,apoptosome,
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.
Function	catalytic activity:Strict requirement for an Asp residue at position P1 and with a marked preference for His at position P2. It has a preferred cleavage sequence of Leu-Gly-His-Asp- -Xaa.,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. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP).,function:Isoform 2



lacks activity is an dominant-negative inhibitor of caspase-9.,online information:Caspase-9 entry,PTM: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.,similarity:Belongs to the peptidase C14A family.,similarity:Contains 1 CARD domain.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers

Background

CASP9 encodes a member of the cysteine-aspartic acid protease (caspase) family. 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 two subunits, large and small, that dimerize to form the active enzyme. Caspase 9 can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. Caspase 9 is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants.

matters needing attention

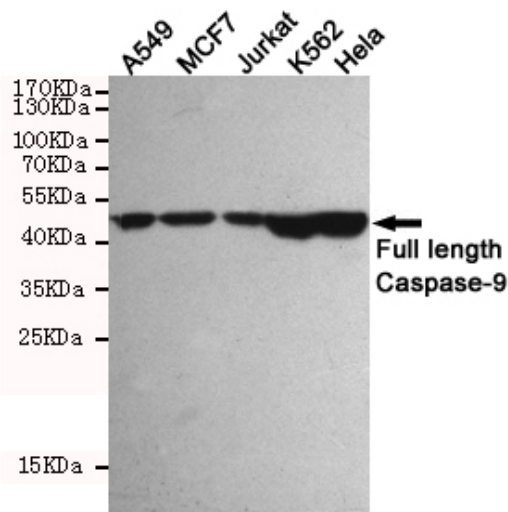
Avoid repeated freezing and thawing!

Usage suggestions

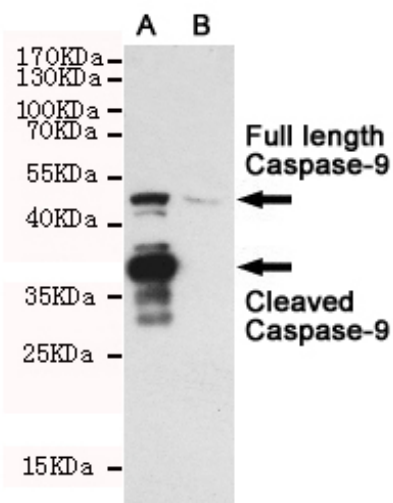
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



Western blot detection of Caspase-9 in A549, MCF7, Jurkat, K562 and Hela cell lysates using Caspase-9 mouse mAb (1:1000 diluted). Predicted band size: 49/37KDa. Observed band size: 49KDa.



Western blot detection of Caspase-9 in CHO-K1 cell lysate (B) and CHO-K1 transfected by Caspase-9 (A) cell lysate using Caspase-9 mouse mAb (1:1000 diluted). Predicted band size: 49/37KDa. Observed band size: 49/37KDa.