



Cleaved-Caspase-9 p10 (D330) Polyclonal Antibody

Catalog No	YP-Ab-17668
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IF;WB;IHC;ELISA
Gene Name	CASP9
Immunogen	The antiserum was produced against synthesized peptide derived from human Caspase 9. AA range:281-330
Specificity	Cleaved-Caspase-9 p10 (D330) Polyclonal Antibody detects endogenous levels of fragment of activated Caspase-9 p10 protein resulting from cleavage adjacent to D330.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Caspase-9;CASP9;Caspase9;MCH6;CASP-9;Apoptotic protease Mch-6; Apoptotic protease-activating factor 3;APAF-3;ICE-like apoptotic protease 6;ICE-LAP6
Observed Band	10 46kD
Calculated Molecular Weight	10 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

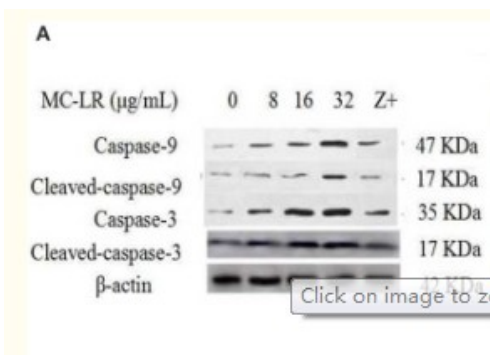
Avoid repeated freezing and thawing!

Usage suggestions

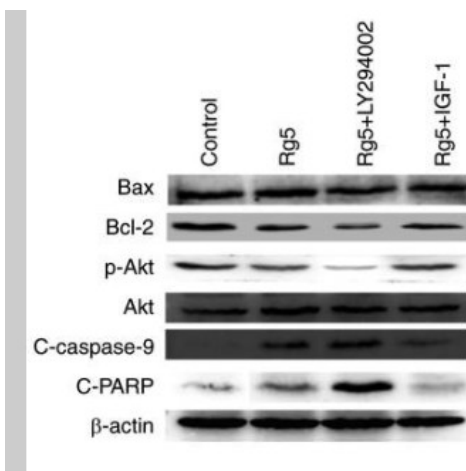
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



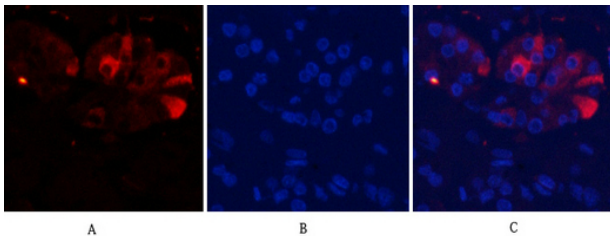
Products Images



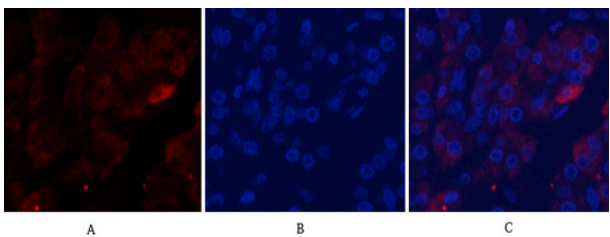
Huang, Hui, et al. "Microcystin-LR Induced Apoptosis in Rat Sertoli Cells via the Mitochondrial Caspase-Dependent Pathway: Role of Reactive Oxygen Species." *Frontiers in physiology* 7 (2016): 397.



Zhang, Daoming, et al. "Ginsenoside Rg5 induces apoptosis in human esophageal cancer cells through the phosphoinositide 3 kinase/protein kinase B signaling pathway." *Molecular medicine reports* 19.5 (2019): 4019-4026.



Immunofluorescence analysis of human-stomach-cancer tissue. 1, Cleaved-Caspase-9 (D353) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of human-stomach-cancer tissue. 1, Cleaved-Caspase-9 (D353) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

Immunohistochemical analysis of paraffin-embedded Human-testis tissue. 1, Cleaved-Caspase-9 (D353) Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

ibody only.