



# Caspase-9 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-00349                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Name</b>                   | CASP9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human Caspase 9. AA range:91-140                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specificity</b>                 | Caspase-9 Monoclonal Antibody detects endogenous levels of Caspase-9 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>                      | Monoclonal, mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                    | CASP9;Caspase 9;Caspase 9/p35/p10;APAF 3;APAF3;Caspase-9;Caspase9;MCH6;CASP-9;Apoptotic protease Mch-6;Apoptotic protease-activating factor 3;APAF-3;ICE-like apoptotic protease 6;ICE-LAP6                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Observed Band</b>               | 46kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Calculated Molecular Weight</b> | 46kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cell Pathway</b>                | nucleus,mitochondrion,cytosol,apoptosome,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Tissue Specificity</b>          | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Function</b>                    | 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

This gene 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. This protein 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. This protein is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013],

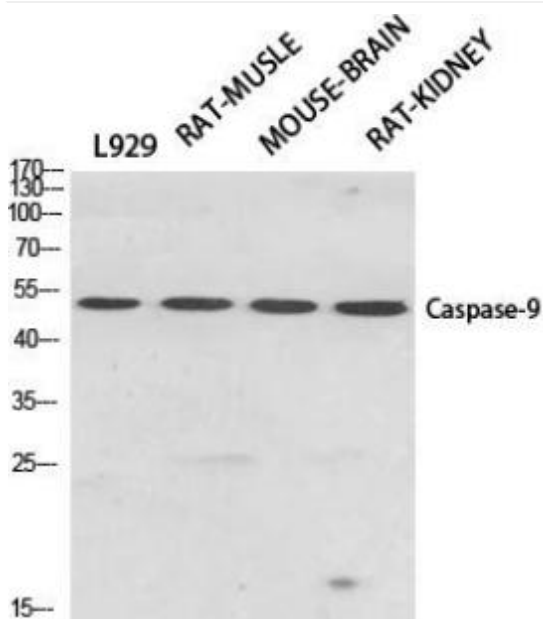
#### matters needing attention

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 analysis of various cells using Caspase-9 Monoclonal Antibody diluted at 1:500