

# Caspase-9 (PT0299R) PT™ Rabbit mAb

CatalogNo: YM8173 Recombinant R

### **Key Features**

**Host Species** 

Rabbit

MW

46kD (Calculated)
40kD (Observed)

Reactivity

Human, Mouse

Isotype

IgG,Kappa

**Applications** 

WB,IHC,IF,ELISA

### Recommended Dilution Ratios

IHC 1:500-1:1000 WB 1:1000-1:5000 IF 1:200-1:1000

ELISA 1:5000-1:20000,

## Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

### **Basic Information**

**Clonality** Monoclonal

Clone Number PT0299R

### Immunogen Information

**Specificity** Endogenous

### | Target Information

#### Gene name

CASP9

#### **Protein Name**

Caspase9

Organism	Gene ID	UniProt ID
Human	<u>842;</u>	<u>P55211;</u>
Rat	<u>58918;</u>	<u>Q9JHK1;</u>

### Cellular Localization

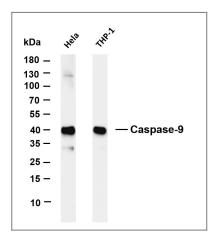
Cytoplasm

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.

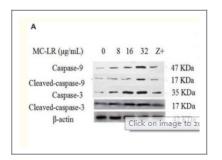
#### **Function**

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 seguence of Leu-Gly-His-Asp-l-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 antiparallel arranged heterodimers, each one formed by a 35 kDa (p35) and a 10 kDa (p10) subunit. Caspase-9 and APAF1 bind to each other via their respective NH2-terminal CED-3 homologous domains in the presence of cytochrome C and ATP. Interacts with the inhibitors BIRC2, BIRC4, BIRC5 and BIRC7., tissue specificity: Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues.,

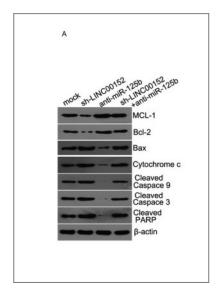
### Validation Data



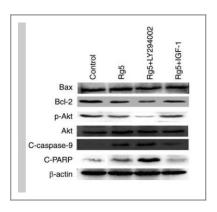
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Caspase-9 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: THP-1 Predicted band size: 46kDa Observed band size: 40kDa



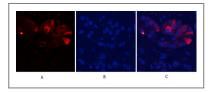
Huang, Hui, et al. "Microcystin-LR Induced Apoptosis in Rat Sertoli Cells via the Mitochondrial Caspase-Dependent Pathway: Role of Reactive Oxygen Species." Frontiers in physiology 7 (2016): 397.



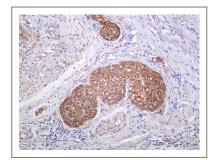
Chen, Puxiang, et al. "Long noncoding RNA LINC00152 promotes cell proliferation through competitively binding endogenous miR-125b with MCL-1 by regulating mitochondrial apoptosis pathways in ovarian cancer." Cancer medicine 7.9 (2018): 4530-4541.



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) Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled 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



Human cervix carcinoma was stained with anti-Caspase-9 (PT0299R) Rabbit antibody

### Contact information

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Please scan the QR code to access additional product information:

Caspase-9 (PT0299R) PT™ Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents