**bs-0049R** **[ Primary Antibody ]**

# Caspase-9 Rabbit pAb

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## DATASHEET

**Host:** Rabbit **Isotype:** IgG

**Clonality:** Polyclonal

**GeneID:** 842 **SWISS:** P55211

**Target:** Caspase-9

**Immunogen:** KLH conjugated synthetic peptide derived from human Caspase-9 subunit p35: 11-120/416.

**Purification:** affinity purified by Protein A

**Concentration:** 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Caspase 9 (also known as ICE like apoptotic protease 6 (ICE LAP6), apoptotic protease Mch6, and apoptotic protease activating factor 3 (Apaf3)) is a member of the peptidase family C14 that contains a CARD domain. This caspase is active as a heterotetramer and has been reported to have two isoforms. ProCaspase 9 has been reported to be approximately 47 kD. This caspase is present in the cytosol and, upon activation, translocates to the mitochondria. Caspase 9 is involved in the caspase activation cascade responsible for apoptosis execution and cleaves/activates Caspase 3 and Caspase 6. Caspase 9 is inhibited by the dominant negative isoform, BclXL, cIAP1, cIAP2, XIAP, and Livin. This caspase becomes activated when recruited to Apaf1/cytochrome c complex, and following cleavage by Apaf1, granzyme B, Caspase 3, possibly Caspase 8 and Caspase 10 into large p37 and small p10 subunits. Caspase 9 intereacts with BIRC7 and has been shown to cleave PARP and vimentin.

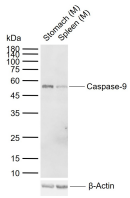
**Applications:** **WB** (1:500-2000)
**IHC-P** (1:100-500)
**IHC-F** (1:100-500)
**IF** (1:100-500)
**Flow-Cyt** (1μg/test)
**ICC/IF** (1:100)

**Reactivity:** Human, Mouse, Rat, Dog (predicted: Cow)

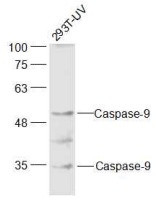
**Predicted MW.:** 35/50 kDa

**Subcellular Location:** Cytoplasm

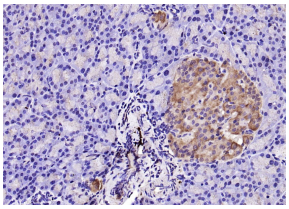
## VALIDATION IMAGES



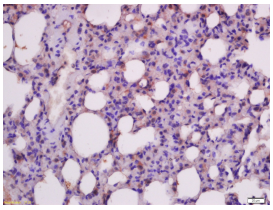

Sample: Lane 1: Mouse Stomach tissue lysates Lane 2: Mouse Spleen tissue lysates Primary: Anti-Caspase-9 (bs-0049R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 35/50 kDa Observed band size: 52 kDa



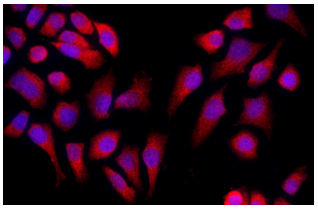

Sample: 293T-UV Cell (Human) Lysate at 30 ug Primary: Anti-Caspase-9 (Bs- 0049R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 35/50 kD Observed band size: 35/50 kD



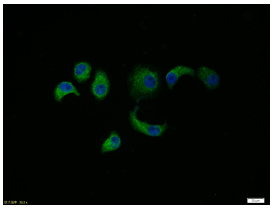
Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caspase-9) Polyclonal Antibody, Unconjugated (bs-0049R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



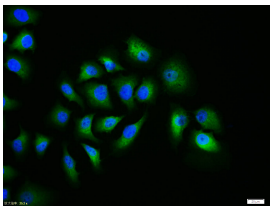
Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Insulin like growth factor 1 ) Polyclonal Antibody, Unconjugated (bs-0014R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



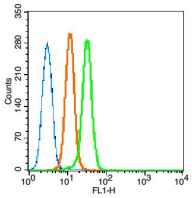
Tissue/cell: MCF-7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Caspase-9) Polyclonal Antibody, Unconjugated (bs-0049R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-Cy3) at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



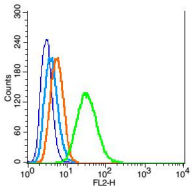
Tissue/cell: HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Caspase-9) polyclonal Antibody, Unconjugated (bs-0049R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Caspase-9) polyclonal Antibody, Unconjugated (bs-0049R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.




Blank control: K562 (blue). Primary Antibody:Rabbit Anti-caspase-9 antibody (bs-0049R,Green); Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 80% methanol (5 min) and and then permeabilized with 0.01M PBS-Tween for 20 min . Primary antibody (bs-0049R, 1μg /1x10^6 cells) were incubated for 30 min at room temperature, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (30min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/FITC antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min at room temperature. Acquisition of 20,000 events was performed.




Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1μg in 100 μL1X PBS containing 0.5% BSA(green).

## SELECTED CITATIONS


- **[IF=11.508]** Qinyu Ma. et al. Osteoclast-derived apoptotic bodies couple bone resorption and formation in bone remodeling. Bone Res. 2021 Jan;9(1):1-12 WB ;Mouse. 33431863
- **[IF=10.6]** Jia Xueli. et al. Gene editing tool-loaded biomimetic cationic vesicles with highly efficient bacterial internalization for in vivo eradication of pathogens. J NANOBIOTECHNOL. 2024 Dec;22(1):1-20 WB ;Acinetobacter baumannii. 39710679
- **[IF=7.7]** Xishuai Tong. et al. Angelica sinensis polysaccharides mitigate cadmium-induced apoptosis in layer chicken chondrocytes by inhibiting the JNK signaling pathway. INT J BIOL MACROMOL. 2024 Oct;:137106 WB ;Chicken. 39486695
- **[IF=6.551]** Wei J et al. Endosulfan induces cardiotoxicity through apoptosis via unbalance of pro-survival and mitochondrial-mediated apoptotic pathways. Sci Total Environ . 2020 Jul 20;727:138790. WB ;human. 32344260
- **[IF=7.086]** Jiangnan Yi. et al. Battery wastewater induces nephrotoxicity via disordering the mitochondrial dynamics. CHEMOSPHERE. 2022 Sep;303:135018 WB ;Mouse. 35605732