bs-20773R **[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: 231-330/416.

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.

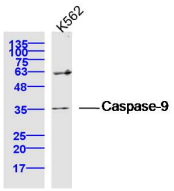
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)
ICC/IF (1:100)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Sheep, Cow)

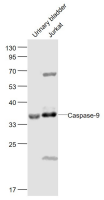
Predicted MW.: 35/50 kDa

Subcellular Location: Cytoplasm

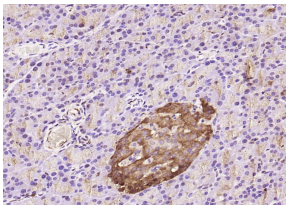
VALIDATION IMAGES



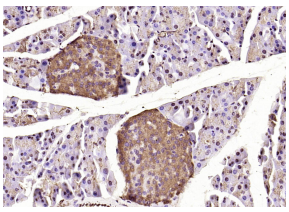
Sample: K562 Cell (Human) Lysate at 40 ug Primary: Anti-Caspase-9 (bs-20773R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 35/50 kD Observed band size: 35 kD



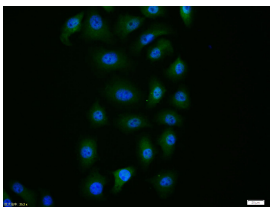
Sample: Urinary bladder(Mouse) Lysate at 40 ug Jurkat(Human) Cell Lysate at 30 ug Primary: Anti-Caspase-9 (bs-20773R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46-51'35'37 kD Observed band size: 35 kD



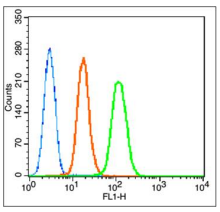
Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caspase-9) Polyclonal Antibody, Unconjugated (bs-20773R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse 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-20773R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



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-20773R) 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.



Overlay histogram showing Hela cells(1ug/1x10^6 cells) stained with bs-20773R (Green line). The cells were fixed with 80% methanol (5 min) and and then permeabilized with 0.01M PBS-Tween for 20 min . The cells were then incubated in 1x PBS/10% normal goat serum to block non-specific protein-protein interactions followed by the antibody for 30 min at 22°C. The secondary antibody used was fluorescein isothiocyanate goat anti-rabbit IgG (H+L) (bs-0295G-FITC , Brillant blue line) at 1/200 dilution for 30 min at 22°C. Isotype control antibody was rabbit IgG (polyclonal,bs-0295P,Orange line) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of 20,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

SELECTED CITATIONS

- **[IF=9.8]** Bohan Chen. et al. Inhalation of ammonia promotes apoptosis and induces autophagy in hepatocytes via Bax/BCl-2 and m-TOR/ATG5/LC-3bII axes. SCI TOTAL ENVIRON. 2024 Feb;912:169036 WB ;Mouse. 38061639
- **[IF=7.169]** Zhu Sai-ya. et al. COX17 restricts renal fibrosis development by maintaining mitochondrial copper homeostasis and restoring complex IV activity. ACTA PHARMACOL SIN. 2023 May;:1-12 WB ;Human， Rat. 37217601
- **[IF=7.129]** Furui Han. et al. In vivo and in vitro study on hepatotoxicity of Tris-(2, 3-dibromopropyl) isocyanurate exposure via mitochondrial and death receptor pathway. ECOTOX ENVIRON SAFE. 2022 Nov;246:114186 WB ;Rat, Human. 36244175
- **[IF=4.8]** Danyan Li. et al.Mechanism of Yinxu Weitong Capsule in the treatment of precancerous lesions of gastric cancer based on network pharmacology and experimental validation.journal of ethnopharmacology.2025 Feb 11:341:119303. Western blot ;Rat. 39761837
- **[IF=4.2]** Qiong Ma. et al. A Preliminary Study on Quantitative Analysis of Collagen and Apoptosis Related Protein on 1064 nm Laser-Induced Skin Injury. BIOLOGY-BASEL. 2024 Apr;13(4):217 IHC ;Pig. 10.3390/biology13040217