SunLong Biotech Co.,LTD
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Rabbit Anti-Caspase-9 antibody

SL0049R

Product Name	Caspase-9
Chinese Name	活化半胱胺酸蛋白酶蛋白-9 抗体
Alias	Caspase-9 subunit p35; Apaf-3; APAF 3; APAF3; Apoptosis related cysteine peptidase; Apopto activating factor 3; Apoptotic protease MCH 6; Apoptotic protease MCH6; CASP 9; CASP9; Ca Caspase 9 apoptosis related cysteine protease; Caspase 9 precursor; Caspase 9c; Caspase9; Caspa p10; ICE LAP6; ICE like apoptotic protease 6; RNCASP9; MCH 6; MCH6; OTTHUMP000000 CASP9_HUMAN.
Research Area	Tumour Cell biology Neurobiology Signal transduction Apoptosis
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat (predicted:Dog,Cow)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-C （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	35/50kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Caspase-9 subunit p35: 11-120/416
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d

applications.

PubMed

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

Product Detail

Function:
Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of ca Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Proteolytic poly(ADP-ribose) polymerase (PARP).
Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9.

Subunit:
Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 35 and a 10 kDa (p10) subunit. Caspase-9 and APAF1 bind to each other via their respective NH2-t CED-3 homologous domains in the presence of cytochrome C and ATP. Interacts (inactive form EFHD2. Interacts with HAX1. Interacts with BIRC2/c-IAP1, XIAP/BIRC4, BIRC5/survivin, BI and BIRC7/livin.

Tissue Specificity:
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, ar Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Post-translational modifications:
Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subu Caspase-8 and -10 can also be involved in these processing events.
Phosphorylated at Thr-125 by MAPK1/ERK2. Phosphorylation at Thr-125 is sufficient to block processing and subsequent caspase-3 activation.

Similarity:
Belongs to the peptidase C14A family.
Contains 1 CARD domain.

SWISS:
P55211

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Gene ID:
842

Database links:

Entrez Gene: 842 Human

Entrez Gene: 12371 Mouse

Entrez Gene: 58918 Rat

Omim: 602234 Human

SwissProt: P55211 Human

SwissProt: Q4FJK5 Mouse

SwissProt: Q920G4 Rat

Unigene: 329502 Human

Unigene: 88829 Mouse

Unigene: 32199 Rat

Caspase-9 半胱氨酸蛋白酶家族成员之一，又称 ICE-Lap6（ICE Like apoptotease 6）参与 A
程和 cell factor 的加工过程，在许多胚胎和成人组织中都有分布。此抗体主要用于 Tumou

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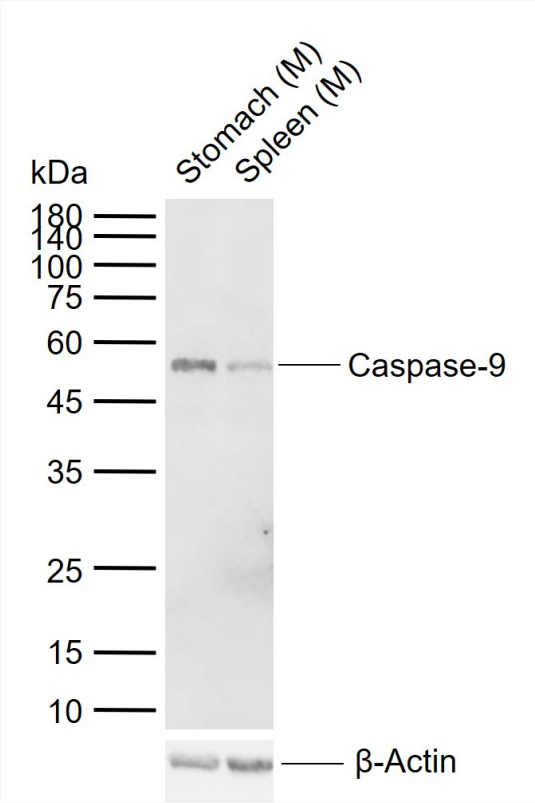
Product Picture



Sample:

Lane 1: Mouse Stomach tissue lysates

Lane 2: Mouse Spleen tissue lysates

Primary: Anti-Caspase-9 (SL0049R) 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

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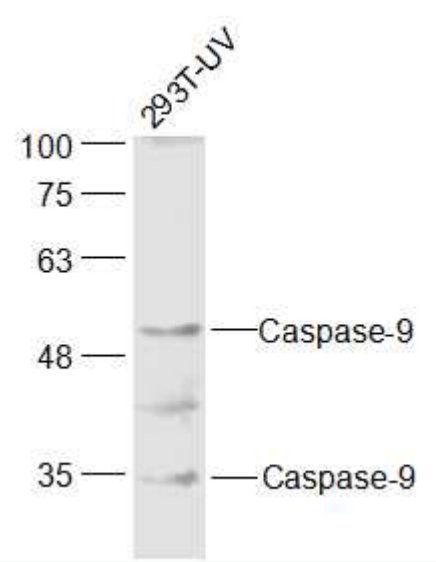

Sample:

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

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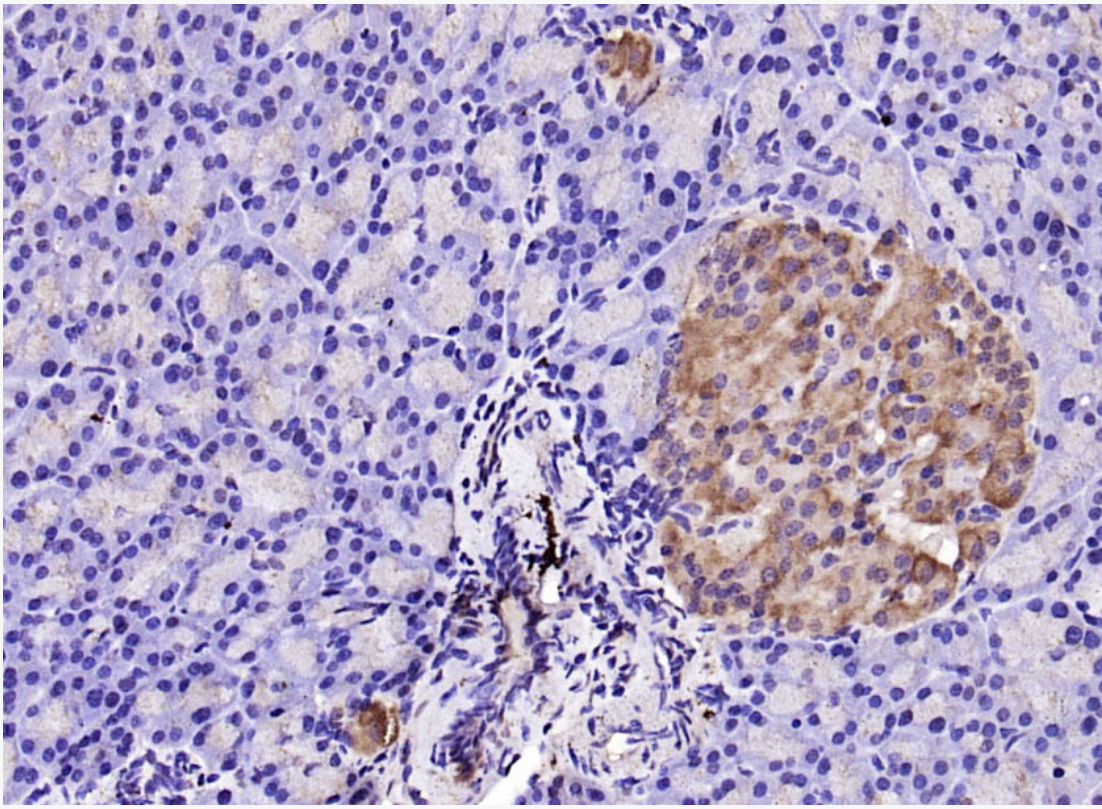

Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodi
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caspase-9
Polyclonal Antibody, Unconjugated (SL0049R) at 1:200 overnight at 4°C, followed by operat
according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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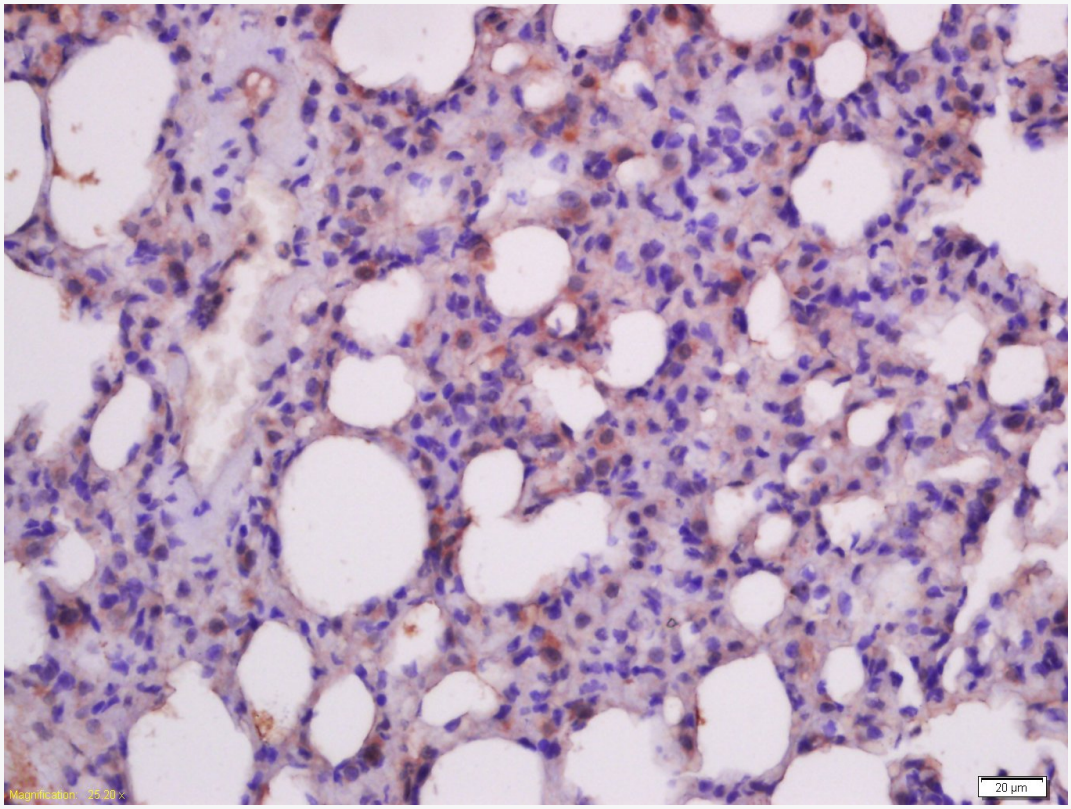

Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Insulin lik factor 1) Polyclonal Antibody, Unconjugated (SL0014R) at 1:400 overnight at 4°C, followed conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.

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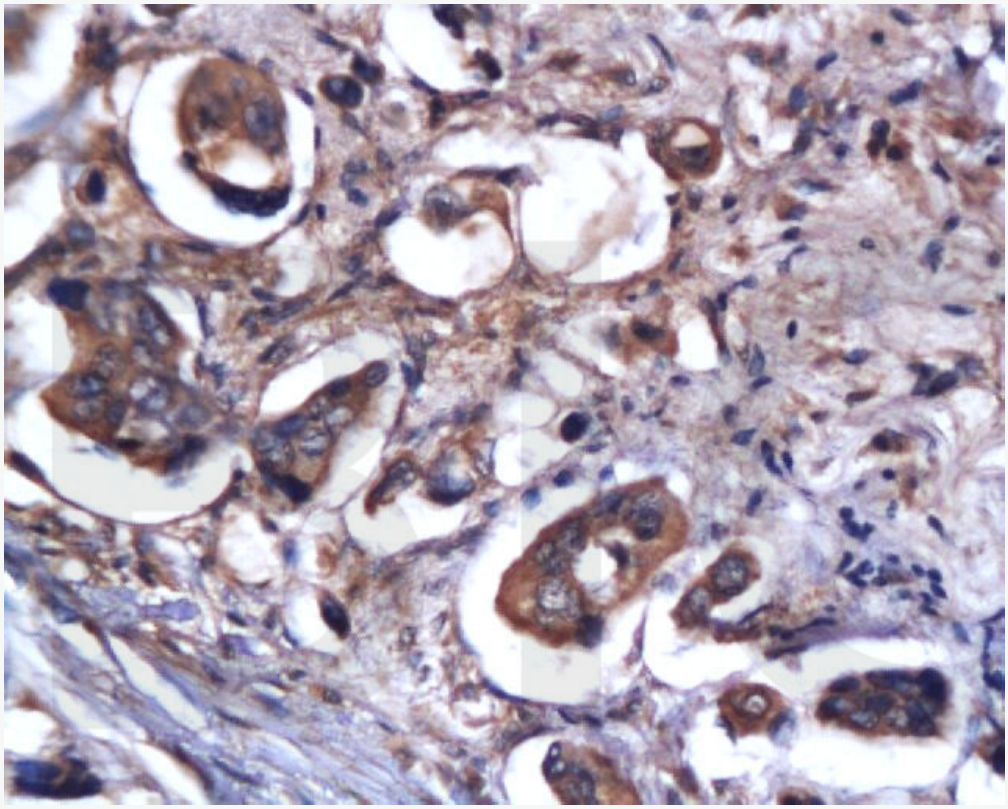

Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous p

by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ fo

Incubation: Anti-Caspase-9 Polyclonal Antibody, Unconjugated(SL0049R) 1:200, overnight a

followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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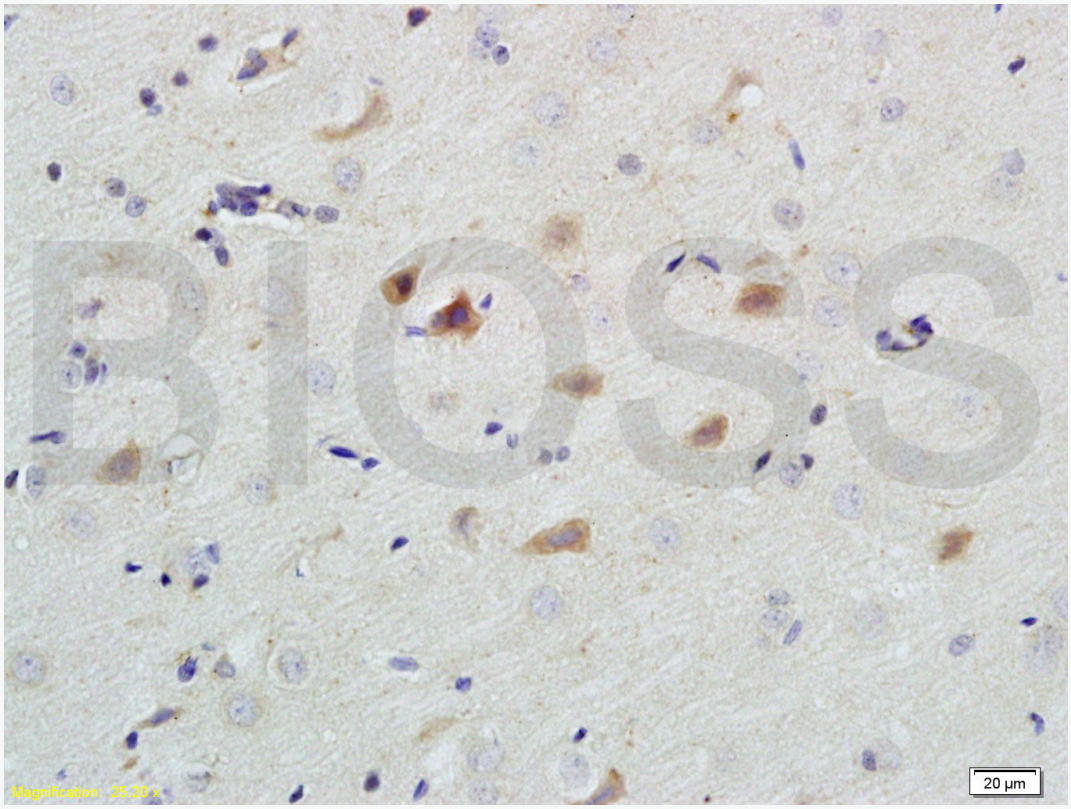

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous p

by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ fo

Incubation: Anti-Caspase-9 Polyclonal Antibody, Unconjugated(SL0049R) 1:200, overnight a

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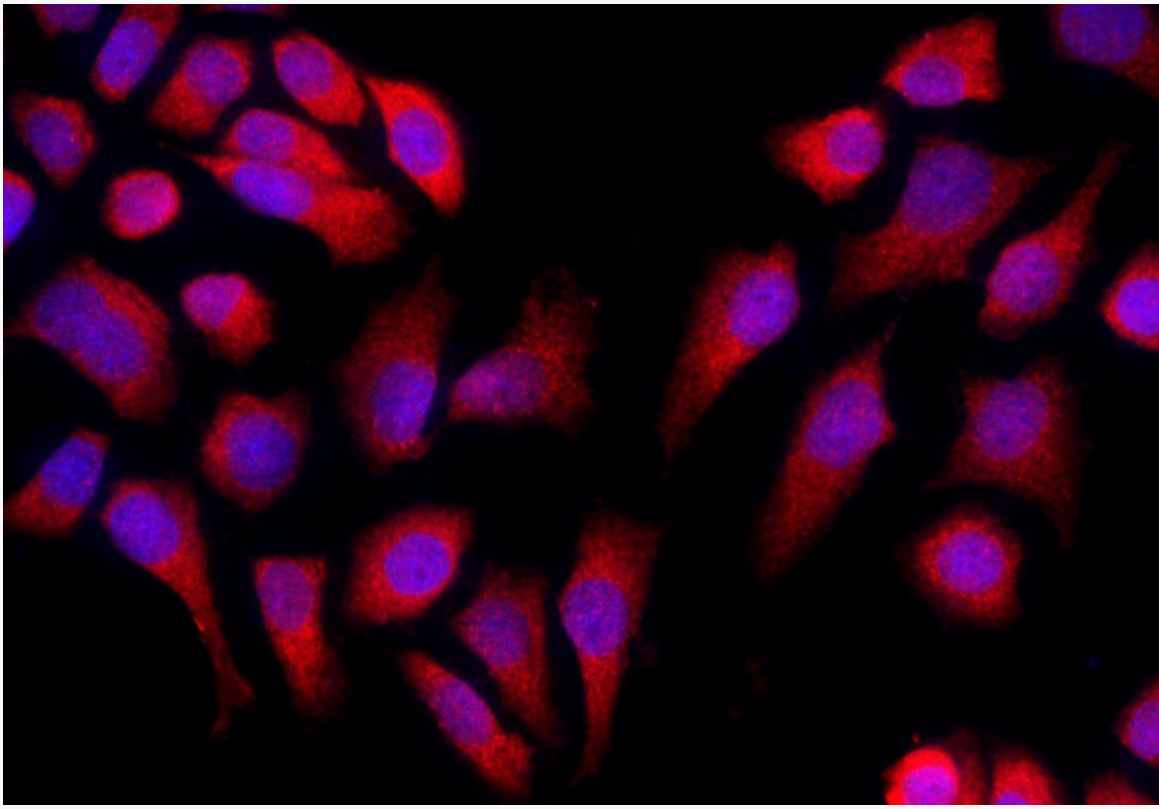

Tissue/cell: MCF-7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 2

Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (C

Polyclonal Antibody, Unconjugated (SL0049R) 1:50, 90 minutes at 37°C; followed by a conjug

Anti-Rabbit IgG antibody (SL0295G-Cy3) at 37°C for 90 minutes, DAPI (blue, C02-04002) w

stain the cell nuclei.

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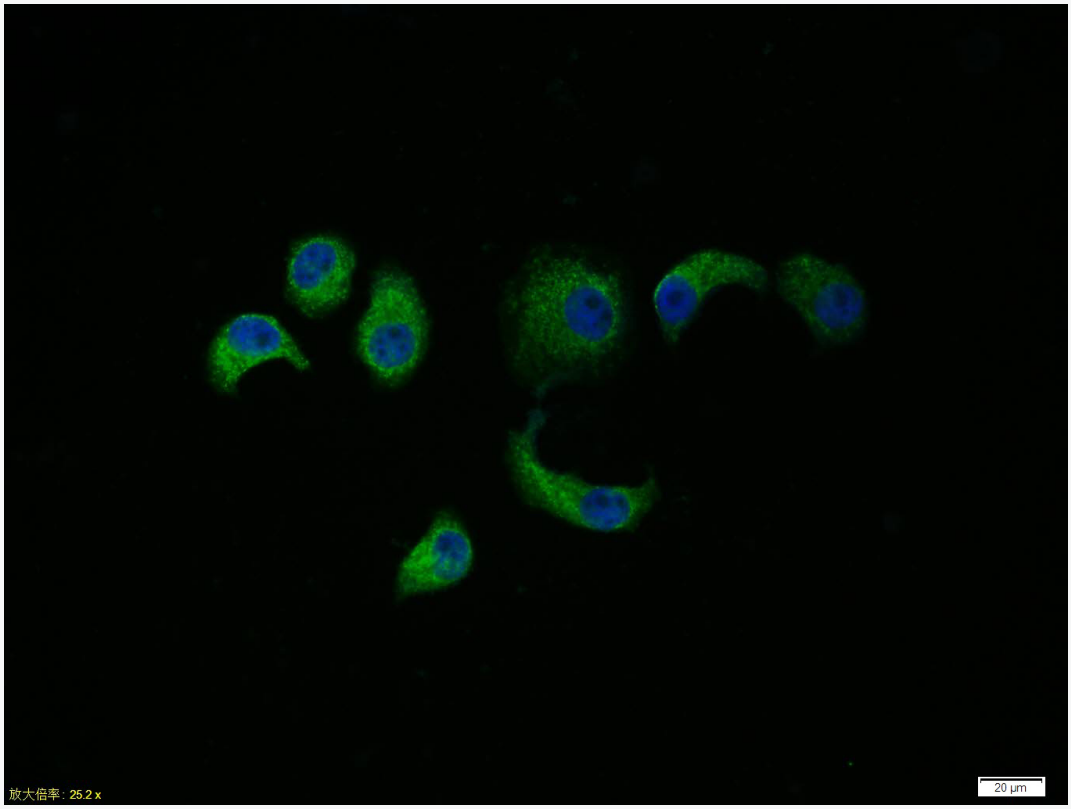

Tissue/cell: HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 2

Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (C

polyclonal Antibody, Unconjugated (SL0049R) 1:100, 90 minutes at 37°C; followed by a FIT

conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) w

stain the cell nuclei.

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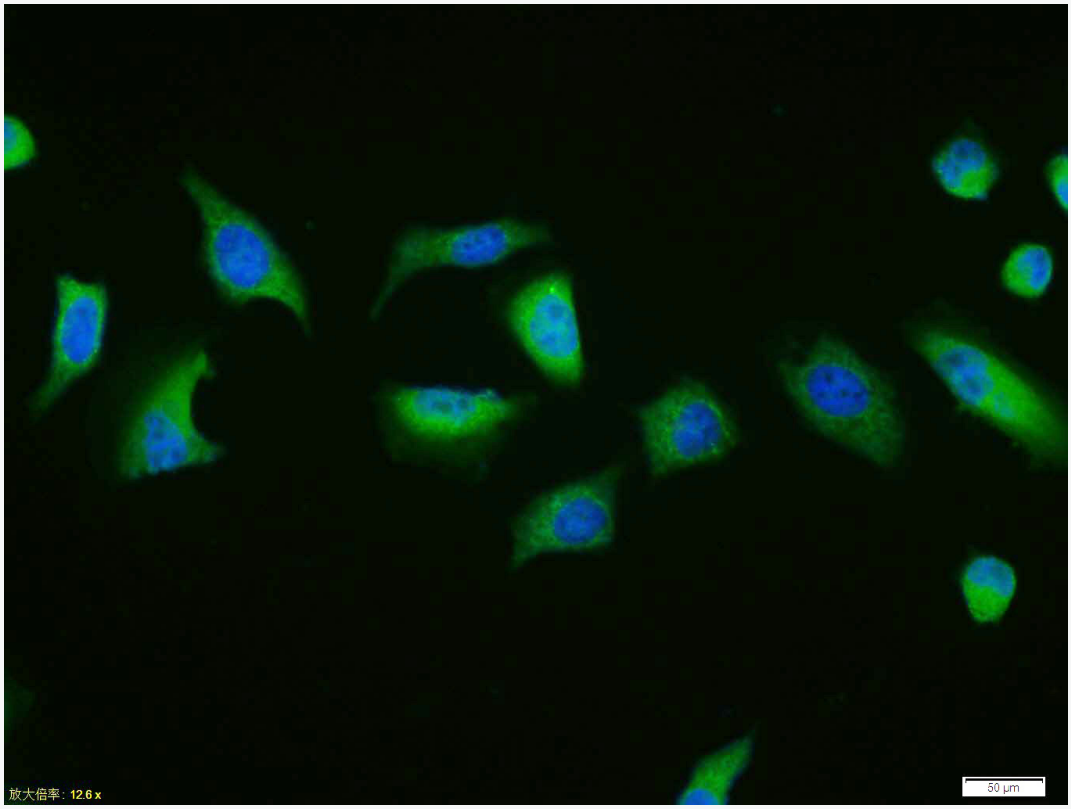

Tissue/cell: Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 m
Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (C
polyclonal Antibody, Unconjugated (SL0049R) 1:100, 90 minutes at 37°C; followed by a FIT
conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) w
stain the cell nuclei.

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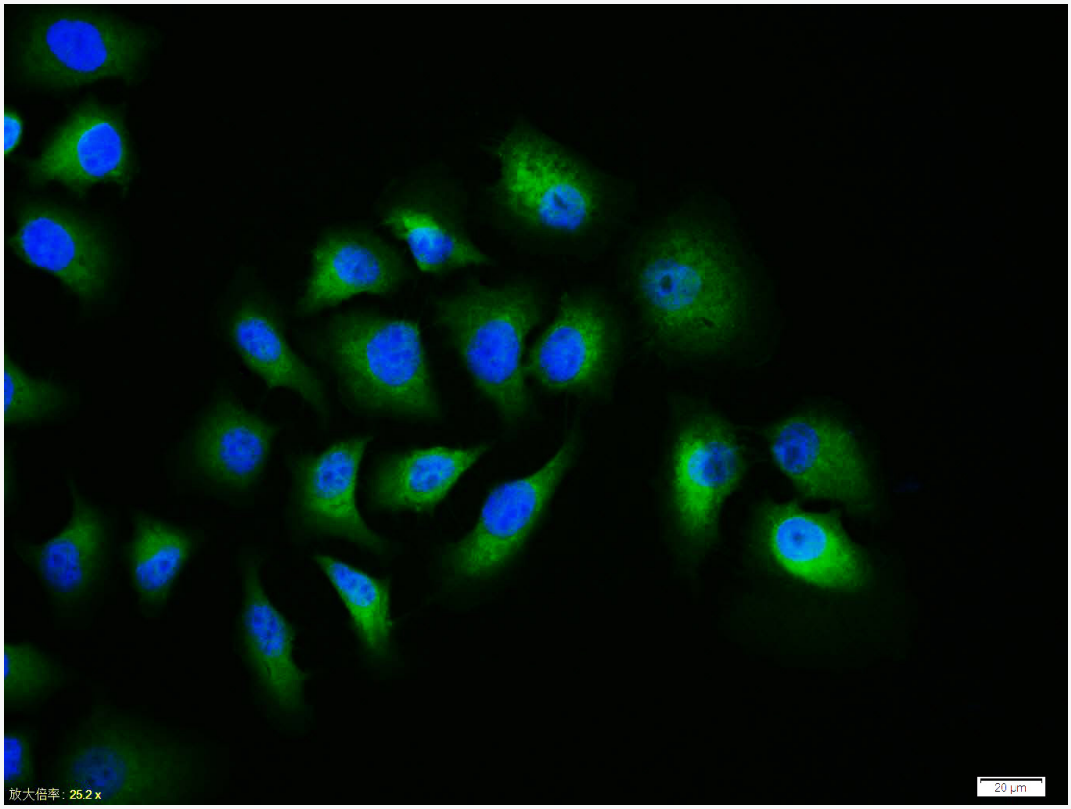

HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Block (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Caspase-9) polyc Antibody, Unconjugated (SL0049R) 1:100, 90 minutes at 37°C; followed by a conjugated Goa Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain t nuclei.

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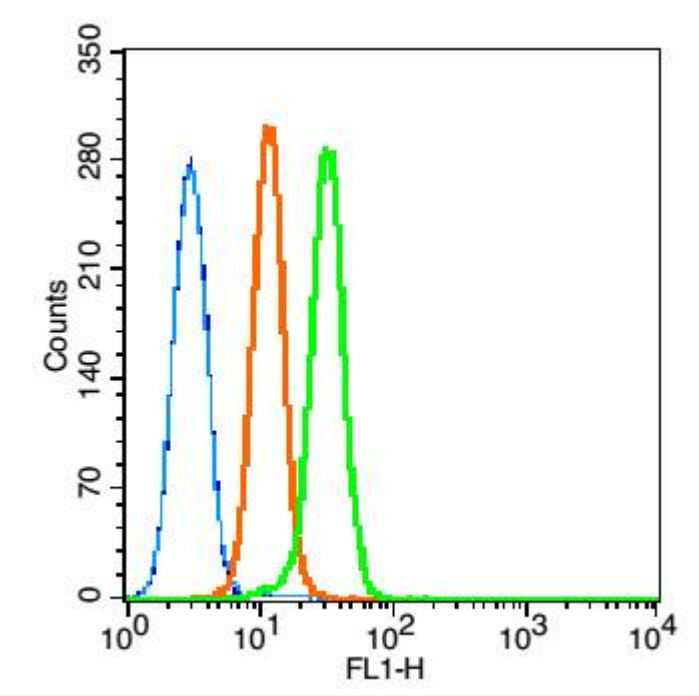


Blank control: K562 (blue).

Primary Antibody:Rabbit Anti-caspase-9 antibody (SL0049R,Green); Dilution: 1μg in 100 μL containing 0.5% BSA;

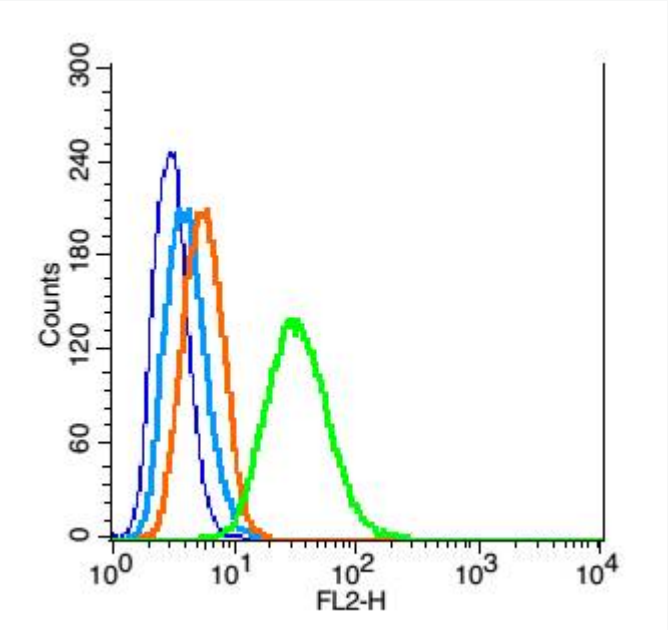
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions;

Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X PBS cont 0.5% BSA.

Protocol

The cells were fixed with 80% methanol (5 min) and and then permeabilized with 1M PBS-Tw min . Primary antibody (SL0049R, 1μg /1x10^6 cells) were incubated for 30 min at room tem 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 buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min at roo

temperature. Acquisition of 20,000 events was performed.



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and the

permeabilized with ice-cold 90% methanol for 30 min on ice.

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE

blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1μg in

PBS containing 0.5% BSA(green).