

# Rabbit Anti-Phospho-Caspase-9 (Ser196) antibody

# SL5241R

Product Name:	Phospho-Caspase-9 (Ser196)
Chinese Name:	磷酸化半胱氨酸蛋白酶9抗体
Alias:	APAF 3; APAF3; Apoptosis related cysteine peptidase; Apoptotic protease activating factor 3; Apoptotic protease Mch 6; CASP 9; CASP9; Caspase 9 Dominant Negative; Caspase 9 precursor; Caspase 9c; Caspase9; EC 3.4.22.; ICE LAP6; ICE like apoptotic protease 6; MCH6 antibody RNCASP9; CASP9_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	35kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human CASP9 around the phosphorylation site of Ser196:FS(p-S)LH
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

#### **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). 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 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. Interacts (inactive form) with EFHD2. Interacts with HAX1.

## 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.

#### Post-translational modifications:

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. Phosphorylated at Thr-125 by MAPK1/ERK2. Phosphorylation at Thr-125 is sufficient to block caspase-9 processing and subsequent caspase-3 activation.

#### Similarity:

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

#### **SWISS:**

P55211

#### 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

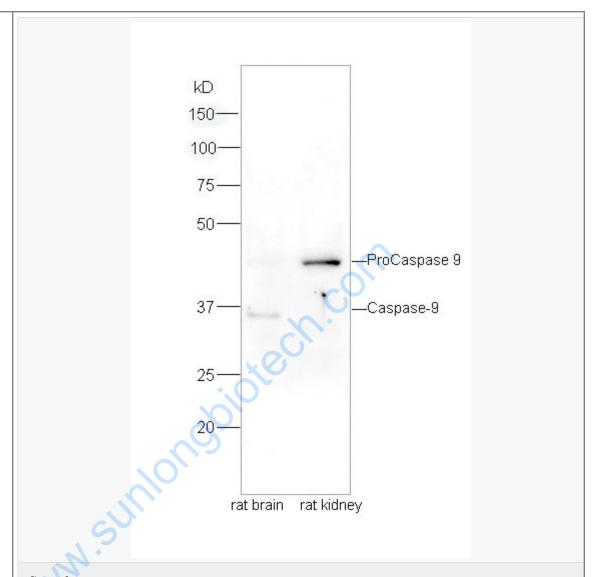
Unigene: 32199 Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Apoptosis过程和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Tumour凋亡的研究。



Picture:

## Sample:

Brain (Rat) Lysate at 40 ug

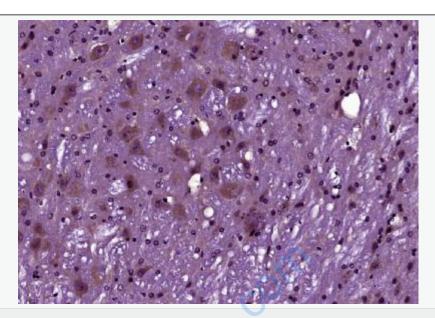
Kidney (Rat) Lysate at 40 ug

Primary: Anti-Phospho-Caspase-9 (Ser196) (SL5241R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL5241R) at 1/5000 dilution

Predicted band size: 35 kD

Observed band size: 35 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (Phospho-Caspase-9 (Ser196)) Polyclonal Antibody, Unconjugated (SL5241R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.