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Rabbit Anti-caspase-9 p10 antibody

SL8502R

Product Name:	caspase-9 p10
Chinese Name:	半胱胺酸蛋白酶蛋白9-p10抗体
Alias:	APAF 3; APAF3; Apoptosis related cysteine peptidase; Apoptotic protease activating factor 3; Apoptotic protease MCH 6; Apoptotic protease MCH6 antibody CASP 9; CASP9; Caspase 9; Caspase 9 apoptosis related cysteine protease; Caspase 9 precursor; Caspase 9 subunit p10; Caspase 9c; Caspase9; Caspase9 subunit p10; ICE LAP6; ICE like apoptotic protease 6; MCH 6; MCH6; OTTHUMP00000044594; CASP9_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg /TestIF=1:50-200（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	10/50 kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human caspase-9 subunit p10:351-416/416
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:	A unique family of cysteine proteases has been described that differs in sequence, structure and substrate specificity from any previously described protease family. This

family, Ced-3/caspase-1, is comprised of caspase-1, caspase-2, caspase-3, caspase-4, caspase-6, caspase-7 (also designated Mch3, ICE-LAP3 or CMH-1), caspase-9 and caspase-10. Ced-3/caspase-1 family members function as key components of the apoptotic machinery and act to destroy specific target proteins which are critical to cellular longevity. Poly(ADP-ribose) polymerase plays an integral role in surveying for DNA mutations and double strand breaks. Caspase-3, caspase-7 and caspase-9, but not caspase-1, have been shown to cleave the nuclear protein PARP into an apoptotic fragment. Caspase-6, but not caspase-3, has been shown to cleave the nuclear lamins which are critical to maintaining the integrity of the nuclear envelope and cellular morphology. Caspase-10 has been shown to activate caspase-3 and caspase-7 in response to apoptotic stimuli.

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 (inactive form) with EFHD2. Interacts with HAX1. Interacts with BIRC2/c-IAP1, XIAP/BIRC4, BIRC5/survivin, BIRC6/bruce and BIRC7/livin.

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.

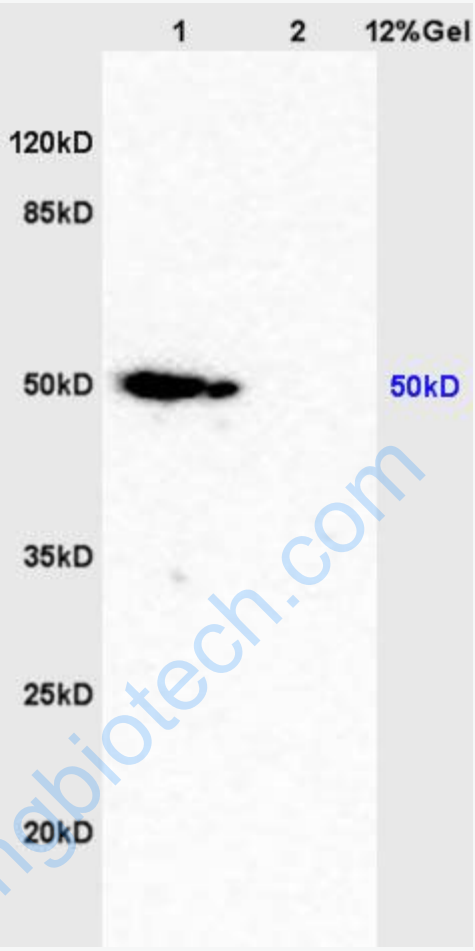
Post-translational modifications:
Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and -10 can also be involved in these processing events. Phosphorylated at Thr-125 by MAPK1/ERK2. Phosphorylation at Thr-125 is sufficient to block caspase-9 processing and subsequent caspase-3 activation.

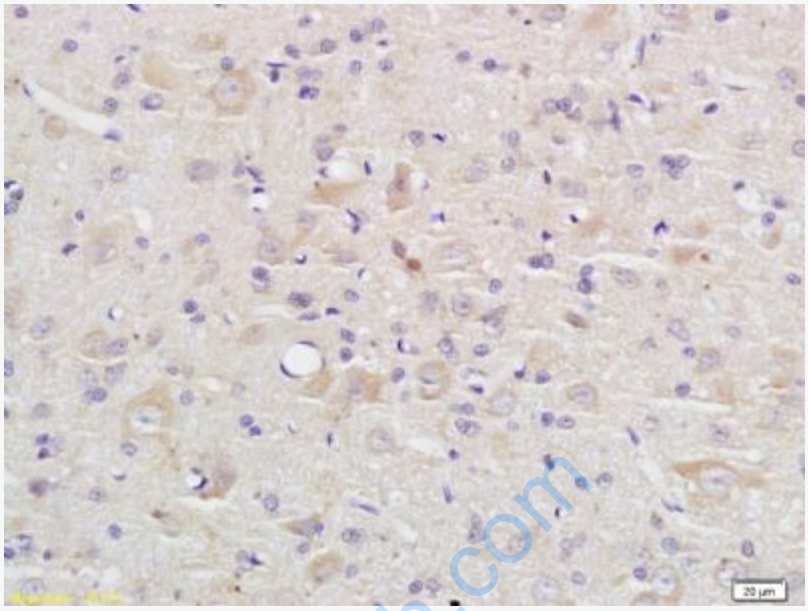
Similarity:
Belongs to the peptidase C14A family.
Contains 1 CARD domain.

SWISS:
P55211

Gene ID:
842

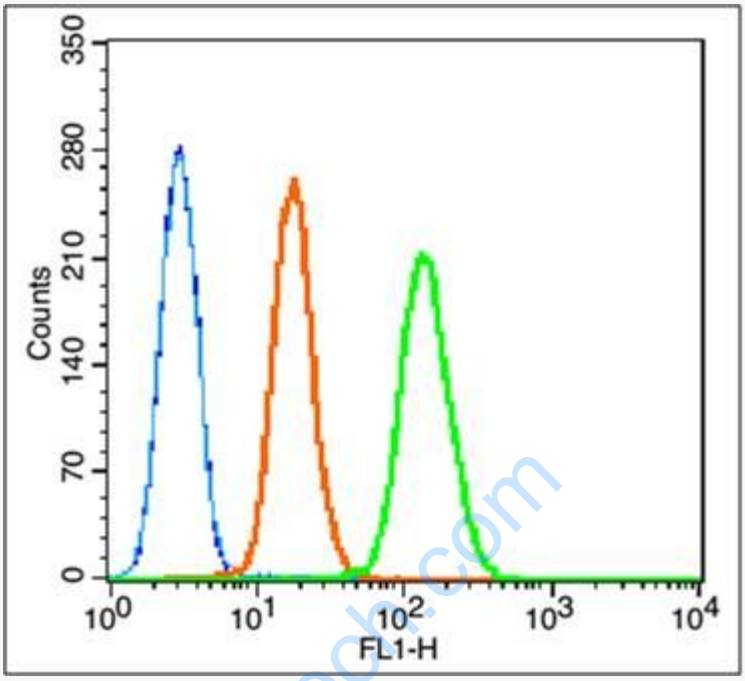
	Database links: Entrez Gene: 842 Human Entrez Gene: 12371 Mouse Entrez Gene: 58918 Rat Omim: 602234 Human SwissProt: P55211 Human SwissProt: Q4FJK5 Mouse SwissProt: Q920G4 Rat Unigene: 329502 Human Unigene: 88829 Mouse Unigene: 32199 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Sample: Brain (Mouse) Lysate at 40 ug Lung (Mouse) Lysate at 40 ug Primary: Anti-caspase-9 p10 (SL8502R) at 1/300 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL8502R) at 1/5000 dilution Predicted band size: 10/50 kD Observed band size: 50 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-caspase-9 p10 Polyclonal Antibody, Unconjugated(SL8502R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:K562 (fixed with 80% methanol (5 min) and and then permeabilized with 0.01M PBS-Tween for 20 min).

Primary Antibody:Rabbit Anti-caspase-9 p10 antibody (SL8502R); 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.