

## Rabbit Anti-Caspase 8 antibody

SL0052R

Product Name:	Caspase 8
Chinese Name:	半胱氨酸蛋白酶8抗体
Alias:	Caspase-8 p10; Caspase-8 subunit p10; ALPS2B; Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 12 protein; Apoptosis related cysteine peptidase; Apoptotic cysteine protease; Apoptotic protease Mch 5; Apoptotic protease Mch5; CAP 4; CAP4; CASP 8; CASP-8; Caspase-8; Caspase8; CASP8; CASP8_HUMAN; Caspase8; Caspase 8 apoptosis related cysteine peptidase; Caspase8; CED 3; FADD homologous ICE/CED 3 like protease; FADD Homologous ICE/CED3 Like Protease; FADD Like ICE antibody FADD-homologous ICE/CED-3- like protease; FADD-like ICE; FLICE; FLJ17672; ICE like apoptotic protease 5; ICE- like apoptotic protease 5; MACH alpha 1/2/3 protein; MACH antibody MACH beta 1/2/3/4 protein antibody MCH 5; MCH5.
	<b>Specific References(9)</b>  SL0052R has been referenced in 9 publications. [IF=3.95]Wang, Gang, et al. "Inhibition of hydrogen sulfide synthesis provides protection for severe acute pancreatitis rats via apoptosis pathway." Apoptosis (2013): 1-
	15.IHC-P;Rat.
	PubMed:23054084
文献引用	[IF=2.33]Wu, Chun-Yan, et al. "PCSK9 siRNA Inhibits HUVEC Apoptosis Induced by
Public ed	ox-LDL via Bcl/Bax-Caspase9-Caspase3 Pathway." Molecular and Cellular
	Biochemistry 359.1-2 (2012): 347-358.WB;Human.
	PubMed:21847580
	[IF=3.53]Fang C, Zhang J, Qi D, Fan X, Luo J, et al. (2014) Evodiamine Induces G2/M
	Arrest and Apoptosis via Mitochondrial and Endoplasmic Reticulum Pathways in H446
	and H1688 Human Small-Cell Lung Cancer Cells. PLoS ONE 9(12): e115204.
	WB;Human.

	PubMed:25506932
	[IF=2.44]Tulsulkar, Jatin, et al. "Ginkgo biloba Extract Prevents Female Mice from Ischemic Brain Damage and the Mechanism Is Independent of the HO1/Wnt Pathway."
	Translational Stroke Research (2015): 1-12.other;
	PubMed:26573919
	[IF=3.40]Gao, Hui, et al. "Hispidulin induces mitochondrial apoptosis in acute myeloid
	leukemia cells by targeting extracellular matrix metalloproteinase inducer."American
	Journal of Translational Research 8.2 (2016): 1115-1132.WB;Human.
	PubMed:27158398
	[IF=2.37]Akinrinde, A. S., et al. "Alterations in blood pressure, antioxidant status and caspase 8 expression in cobalt chloride-induced cardio-renal dysfunction are reversed by Ocimum gratissimum and gallic acid in Wistar rats." Journal of Trace Elements in
	Medicine and Biology 36 (2016): 27-37.Rat.
	PubMed:27259349
	<b>[IF=3.23]</b> Daverey, Amita, and Sandeep K. Agrawal. "Curcumin alleviates oxidative stress and mitochondrial dysfunction in astrocytes." Neuroscience 333 (2016): 92-103.WB;Human.
	PubMed:27423629
	[IF=3.85]Wang, Yandi, et al. "Regulation of steroid hormones and energy status with
	cysteamine and its effect on spermatogenesis." Toxicology and Applied Pharmacology
	(2016).IHC-P;Sheep.
	PubMed:27815134
	<b>[IF=5.23]</b> Zhao, Yong, et al. "Hydrogen Sulfide and/or Ammonia Reduces Spermatozoa
	Motility through AMPK/AKT Related Pathways." Scientific Reports 6 (2016):
	37884.WB;Pig.
Organism Species:	PubMed:27883089 Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=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:	12/55kDa
Cellular localization:	cytoplasmic

Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from rat Caspase-8 subunit p10:411-482/482
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:	Caspases are cysteine proteases, expressed as inactive precursors, that mediate apoptosis by proteolysis of specific substrates. Caspases have the ability to cleave after aspartic acid residues. There are two classes of caspases involved in apoptosis; initiators (activation by receptor cluster) and effectors (activation by mitochondrial permeability transition). Proapoptotic signals autocatalytically activate initiator caspases, such as Caspase 8 and Caspase 9. Activated initiator caspases then process effector caspases, such as Caspase 3 and Caspase 7, which in turn cause cell collapse. <b>Function:</b> Most upstream protease of the activation cascade of caspases responsible for the TNFRSF6/FAS mediated and TNFRSF1A induced cell death. Binding to the adapter molecule FADD recruits it to either receptor. The resulting aggregate called death- inducing signaling complex (DISC) performs CASP8 proteolytic activation. The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases. Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC. Cleaves and activates CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10. May participate in the GZMB apoptotic pathways. Cleaves ADPRT. Hydrolyzes the small-molecule substrate, Ac-Asp-Glu-Val- Asp-I-AMC. Likely target for the cowpox virus CRMA death inhibitory protein. Isoform 5, isoform 6, isoform 7 and isoform 8 lack the catalytic site and may interfere with the pro-apoptotic activity of the complex. <b>Subunit:</b> Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 18 kDa (p18) and a 10 kDa (p10) subunit. Interacts with FADD, CFLAR and PEA15. Isoform 9 interacts at the endoplasmic reticulum with a complex containing BCAP31, BAP29, BCL2 and/or BCL2L1. Interacts with TNFAIP8L2. <b>Subcellular Location:</b> Cytoplasm.
	Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle.

## **DISEASE:**

Defects in CASP8 are the cause of caspase-8 deficiency (CASP8D) [MIM:607271]. CASP8D is a disorder resembling autoimmune lymphoproliferative syndrome (ALPS). It is characterized by lymphadenopathy, splenomegaly, and defective CD95-induced apoptosis of peripheral blood lymphocytes (PBLs). It leads to defects in activation of Tlymphocytes, B-lymphocytes, and natural killer cells leading to immunodeficiency characterized by recurrent sinopulmonary and herpes simplex virus infections and poor responses to immunization.

Similarity:

Belongs to the peptidase C14A family. jotech.com Contains 2 DED (death effector) domains.

SWISS: O89110

Gene ID: 841

Database links:

Entrez Gene: 841 Human

Entrez Gene: 12370 Mouse

Entrez Gene: 54474 Rat

Entrez Gene: 64044 Rat

Omim: 601763 Human

SwissProt: Q14790 Human

SwissProt: 089110 Mouse

SwissProt: Q9JHX4 Rat

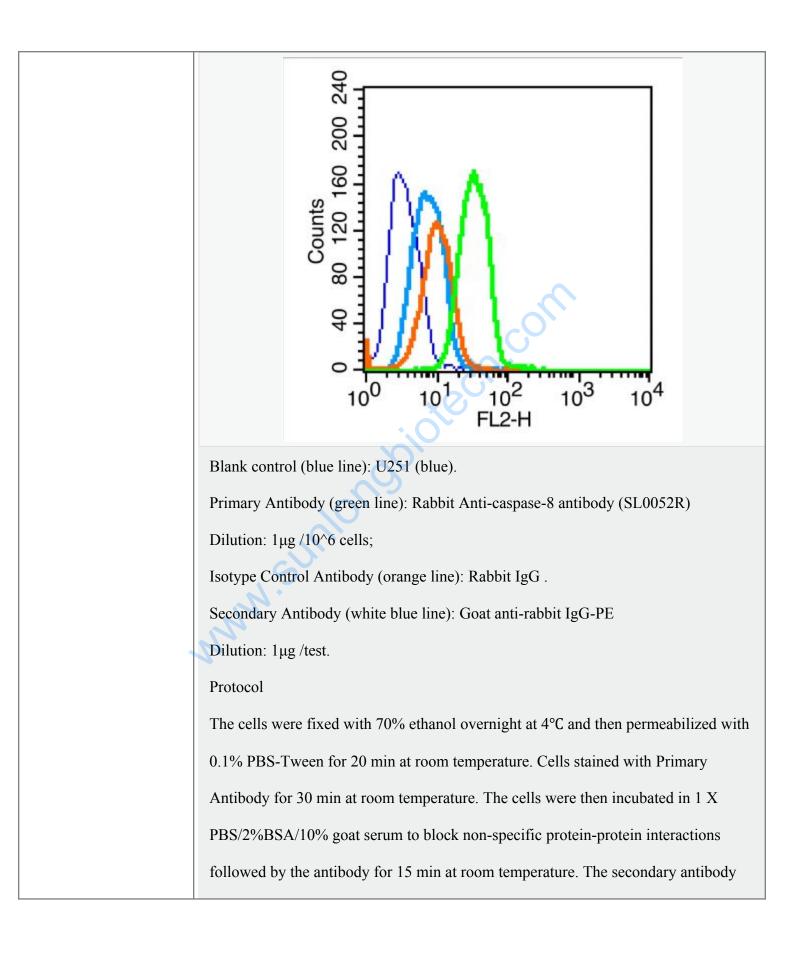
Unigene: 599762 Human

Unigene: 655983 Human

Unigene: 336851 Mouse

**Important Note:** This product as supplied is intended for research use only, not for use in human,

	therapeutic or diagnostic applications.
Picture:	Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by   microwave in sodium citrate buffer (pH6.0); Block endogenous peroxidase by 3%   hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min;   Antibody incubation with (Caspase 8) Polyclonal Antibody, Unconjugated   (SL0052R) at 1:400 overnight at 4°C, followed by conjugation to the secondary   antibody (labeled with HRP)and DAB staining.



used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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