



Rabbit Anti-APAF1(NT) antibody

SL0059R

Product Name:	APAF1(NT)
Chinese Name:	凋亡蛋白活性因子-1抗体(N端)
Alias:	APAF 1; APAF1; APAF-1; Apoptotic peptidase activating factor 1; Apoptotic protease activating factor; CED 4; CED4; KIAA0413; APAF_HUMAN; Apoptotic protease-activating factor 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2ug/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:	137kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Apaf-1:13-80/1248
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:	This gene encodes a cytoplasmic protein that initiates apoptosis. This protein contains several copies of the WD-40 domain, a caspase recruitment domain (CARD), and an ATPase domain(NB-ARC). Upon binding cytochrome c and dATP, this protein forms an oligomeric apoptosome. The apoptosome binds and cleaves caspase 9 preproprotein, releasing its mature, activated form. Activated caspase 9 stimulates the subsequent

caspase cascade that commits the cell to apoptosis. Alternative splicing results in several transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008].

Function:

Oligomeric Apaf-1 mediates the cytochrome c-dependent autocatalytic activation of pro-caspase-9 (Apaf-3), leading to the activation of caspase-3 and apoptosis. This activation requires ATP. Isoform 6 is less effective in inducing apoptosis.

Subunit:

Monomer. Oligomerizes upon binding of cytochrome c and dATP. Oligomeric Apaf-1 and pro-caspase-9 bind to each other via their respective NH₂-terminal CARD domains and consecutively mature caspase-9 is released from the complex. Pro-caspase-3 is recruited into the Apaf-1-pro-caspase-9 complex via interaction with pro-caspase-9. Interacts with AIP. Interacts (via CARD and NACHT domains) with NAIP/BIRC1 (via NACHT domain).

Subcellular Location:

Cytoplasm.

Tissue Specificity:

Ubiquitous. Highest levels of expression in adult spleen and peripheral blood leukocytes, and in fetal brain, kidney and lung. Isoform 1 is expressed in heart, kidney and liver.

Similarity:

Contains 1 CARD domain.
Contains 1 NB-ARC domain.
Contains 13 WD repeats.

SWISS:

O14727

Gene ID:

317

Database links:

[Entrez Gene: 317](#)Human

[Entrez Gene: 11783](#)Mouse

[Entrez Gene: 78963](#)Rat

[Omim: 602233](#)Human

[SwissProt: O14727](#)Human

[SwissProt: O88879](#)Mouse

[SwissProt: Q9EPV5](#)Rat

[Unigene: 728891](#)Human

[Unigene: 220289](#)Mouse

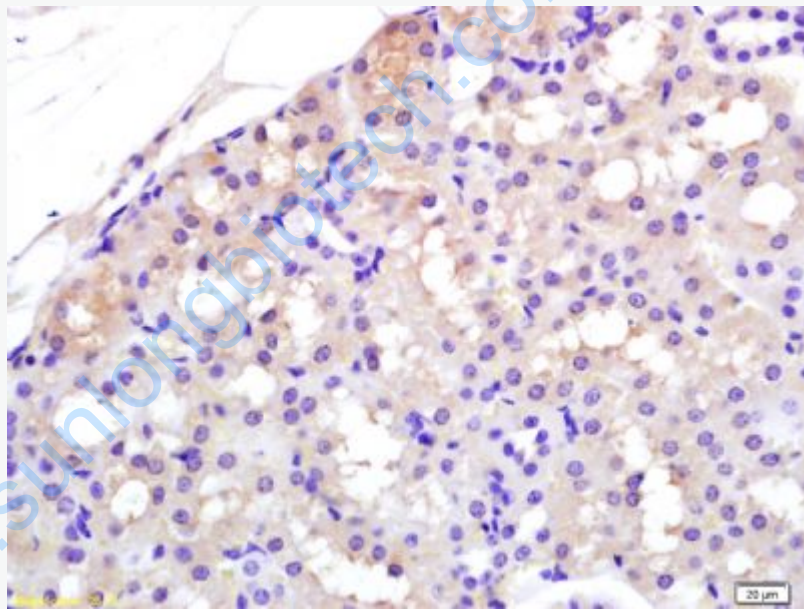
[Unigene: 64522](#)Rat

Important Note:

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

Apaf-1 (Apoptosis protease activating factor-1) 调节细胞色素C依赖的Caspase-9原的自动催化活性, 导致Caspase-3 的激活和引起凋亡。

Apaf-1在成年人的脾脏、外周血白细胞、肾脏、肺和胎儿脑、肾、肺中高水平表达。



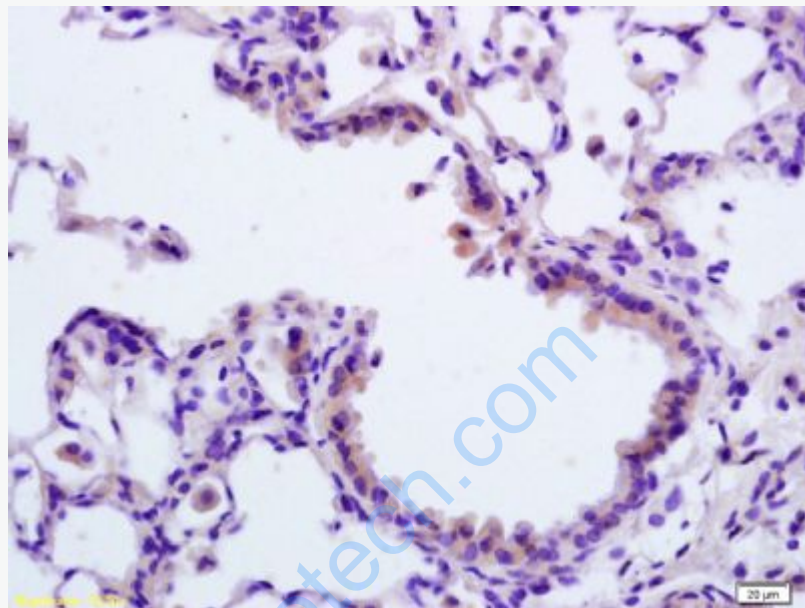
Picture:

Tissue/cell: rat kidney 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°C for 20 min;

Incubation: Anti-APAF1(NT) Polyclonal Antibody, Unconjugated(SL0059R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and

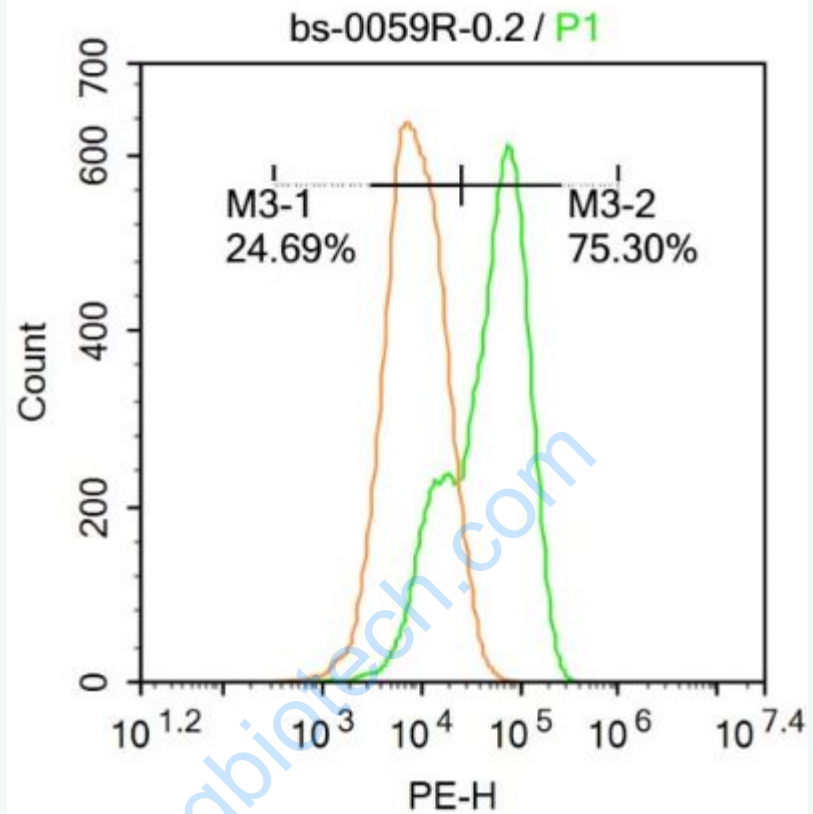
DAB(C-0010) staining



Tissue/cell: rat lung 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°C for 20 min;

Incubation: Anti-APAF1(NT) Polyclonal Antibody, Unconjugated(SL0059R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



U-937 cells were fixed with 4% PFA for 10min at room temperature, permeabilized with 20% PBST for 20 min at room temperature, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with APAF1(NT) Antibody(SL0059R) at 1:500 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).