

## Rabbit Anti-APAF1 (CT)/AP Conjugated antibody

SL0058R-AP

<b>Product Name</b>	Anti-APAF1(CT)/AP
<b>Chinese Name</b>	碱性磷酸酶 (AP) 标记的凋亡蛋白活性因子-1 抗体 (C 端)
<b>Alias</b>	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.
<b>Research Area</b>	Tumour Cell biology Neurobiology Signal transduction Apoptosis
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human,Rat(predicted:Mouse,Dog,Horse,Danio rerio) IHC-P=1:50-200 IHC-F=1:50-200
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	137kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human Apaf-1
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	
<b>Product Detail</b>	<b>background:</b> 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 NH<sub>2</sub>-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 APIP. 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.

**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.

Apaf1 有称：凋亡酶激活因子-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。