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APAF1(CT) Rabbit pAb

Catalog # AP99494

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O14727
Other Accession	O14727
Reactivity	Rat, Human
Predicted	Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	141840
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Apaf-1
Epitope Specificity	1201-1248/1248
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 CARD domain. Contains 1 NB-ARC domain. Contains 13 WD repeats.
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 APIP. Interacts (via CARD and NACHT domains) with NAIP/BIRC1 (via NACHT domain).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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].

Additional Information

Gene ID	317
Other Names	APAF-1; CED4; 6230400I06Rik; Apaf1l; fog; mKIAA0413; APAF_HUMAN; APAF1; KIAA0413; APAF_MOUSE; APAF_RAT; apoptotic peptidase activating factor 1; apoptotic protease activating factor; apoptotic peptidase activating factor
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	APAF1 (HGNC:576)
Synonyms	KIAA0413
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.
Cellular Location	Cytoplasm.
Tissue Location	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

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