

Apaf-1 Polyclonal Antibody

Catalog No: YT5378

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: APAF1

Fields: >>Platinum drug resistance;>>p53 signaling pathway;>>Apoptosis;>>Apoptosis

- multiple species;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic

lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of

neurodegeneration - multiple

diseases;>>Legionellosis;>>Tuberculosis;>>Hepatitis C;>>Hepatitis

B;>>Measles;>>Influenza A;>>Herpes simplex virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Small cell lung cancer;>>Lipid and

atherosclerosis

Gene Name: APAF1

Protein Name: Apoptotic protease-activating factor 1

O14727

O88879

Human Gene Id: 317

Human Swiss Prot

No:

Mouse Gene Id: 11783

Mouse Swiss Prot

No:

Rat Gene Id: 78963

Rat Swiss Prot No: Q9EPV5

Immunogen: The antiserum was produced against synthesized peptide derived from the

Internal region of human APAF1. AA range:501-550

Specificity: Apaf-1 Polyclonal Antibody detects endogenous levels of Apaf-1 protein.

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Soumdation: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 135kD

Cell Pathway: p53;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Alzheim

er's disease; Parkinson's disease; Amyotrophic lateral sclerosis (ALS); Huntington's

disease; Small cell lung cancer;

Background : 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 RefSeg, Jul 2008],

Function: domain: The CARD domain mediates interaction with APIP., function: Oligomeric

Apaf-1 mediates the cytochrome c-dependent autocatalytic activation of procaspase-9 (Apaf-3), leading to the activation of caspase-3 and apoptosis. This

activation requires ATP. Isoform 6 is less effective in inducing

apoptosis.,induction:By E2F and p53 in apoptotic neurons.,similarity:Contains 1 CARD domain.,similarity:Contains 1 NB-ARC domain.,similarity: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.,tissue

specificity:Ubiquitous. Highest levels of expression in adult spleen and per

Subcellular Location:

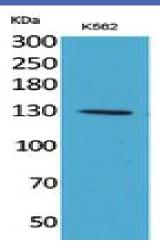
Cytoplasm.

Expression: Ubiquitous. Highest levels of expression in adult spleen and peripheral blood

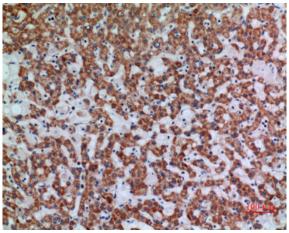
leukocytes, and in fetal brain, kidney and lung. Isoform 1 is expressed in heart,

kidney and liver.

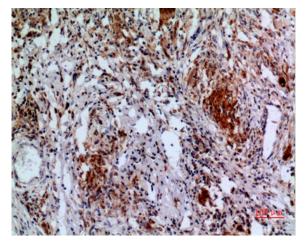
Products Images



Western Blot analysis of K562 cells using Apaf-1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000

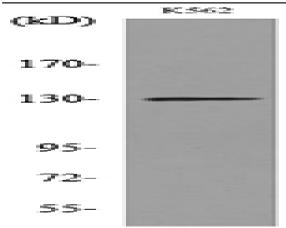


Immunohistochemical analysis of paraffin-embedded humanliver, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded humanlung, antibody was diluted at 1:100





Western blot analysis of lysate from K562 cells, using APAF1 Antibody.