

Apaf-1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10011

Specification

Apaf-1 Antibody - Product Information

Application Primary Accession Reactivity

Host Clonality Isotype Calculated MW <u>O14727</u> Human, Mouse, Rat, Rabbit, Monkey, Bovine, Horse Rabbit Polyclonal Rabbit IgG 141840

Apaf-1 Antibody - Additional Information

Gene ID 317

Application & Usage

Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. The immunoaffinity purified antibody detects a 130 kDa protein, corresponding to the apparent molecular weight of Apaf-1 on SDS-PAGE immunoblots.

Other Names APAF1, CED4, DKFZp781B1145, KIAA0413

Target/Specificity Apaf-1

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 μ g (0.2 mg/ml) immunoaffinity purified, rabbit anti-Apaf-1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.05% BSA, 0.01% thimerosal.

WB

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions



Precautions

Apaf-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Apaf-1 Antibody - 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

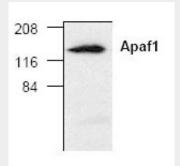
Ubiquitous. Highest levels of expression in adult spleen and peripheral blood leukocytes, and in fetal brain, kidney and lung. Isoform 1 is expressed in heart, kidney and liver

Apaf-1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Apaf-1 Antibody - Images



Western blot analysis of Apaf1 expression in human heart tissue lysate.

Apaf-1 Antibody - Background

During apoptosis, Apaf-1 (apoptosis protease activating factor 1) binds to cytochrome c (Apaf-2), a reaction that requires dATP, and this leads to the formation of a large multimeric complex. The



complex recruits pro-caspase-9, and activates caspase-9 (Apaf-3). Activated caspase-9 in turn cleaves and activates caspase-3, one of the proteases responsible for the proteolytic cleavage of many key proteins in apoptosis. Apaf-1 is ubiquitously expressed in human tissues.