10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Apaf-1 Antibody [2E10]

Catalog # ASC11970

Specification

Apaf-1 Antibody [2E10] - Product Information

Application	**WB, IHC-P, E**
Primary Accession	O14727
Other Accession	AAC51678, 2330015
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**130 kDa KDa**
Application Notes	**Apaf1 antibody can be used for detection of Apaf1 by Western blot at 0.25 - 0.5 mg/mL. A 130 kDa band should be detected. Antibody can also be used for immunohistochemistry starting at 0.5 µg/mL.**

Apaf-1 Antibody [2E10] - Additional Information

Gene ID	**317**

Target/Specificity
APAF1;

Reconstitution & Storage
Apaf-1 monoclonal antibody can be stored at -20℃, stable for one year.

Precautions
Apaf-1 Antibody [2E10] is for research use only and not for use in diagnostic or therapeutic procedures.

Apaf-1 Antibody [2E10] - 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

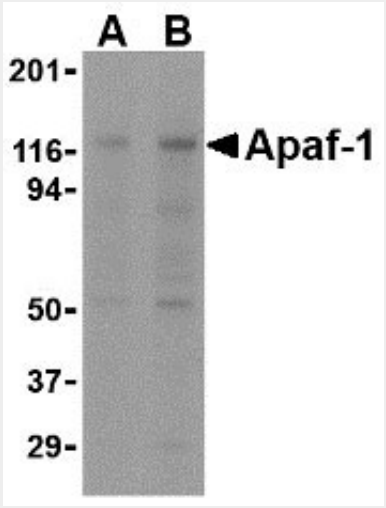
fetal brain, kidney and lung. Isoform 1 is expressed in heart, kidney and liver

Apaf-1 Antibody [2E10] - Protocols

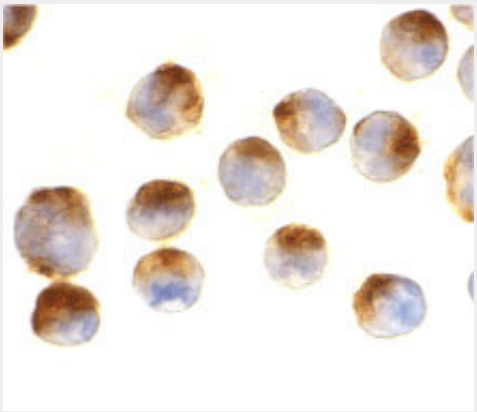
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Apaf-1 Antibody [2E10] - Images



Western blot analysis of Apaf1 in K562 cell lysate with Apaf1 antibody at (A) 0.25 and (B) 0.5 mg/mL.



Immunohistochemistry of Apaf1 in K562 cells with Apaf1 antibody at 0.5 µg/mL.

Apaf-1 Antibody [2E10] - Background

Apaf-1 Monoclonal Antibody: Apoptosis is related to many diseases and induced by a family of cell

death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. The mammalian homologous of the key cell death gene CED-4 in C. elegans was identified recently from human and mouse and designated Apaf1 for apoptosis protease-activating factor 1. Apaf1 binds to cytochrome c (Apaf2) and caspase-9 (Apaf3), which leads to caspase-9 activation. Activated caspase-9 in turn cleaves and activates caspase-3 that is one of the key proteases, being responsible for the proteolytic cleavage of many key proteins in apoptosis. Apaf1 can also associate with caspase-4 and caspase-8. Apaf1 transcript is ubiquitously expressed in human tissues.

Apaf-1 Antibody [2E10] - References

Zou H, Henzel WJ, Liu X, et al. Apaf-1, a human protein homologous to C. elegans CED-4, participates in cytochrome c-dependent activation of caspase-3. Cell 1997; 90:405-13.
Cecconi F, Alvarez-Bolado G, Meyer BI, et al. Apaf1 (CED-4 homolog) regulates programmed cell death in mammalian development. Cell 1998; 94:727-37.
Li P, Nijhawan D, Budihardjo I, et al. Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade. Cell 1997; 91:479-89.
Hu Y, Benedict MA, Wu D, et al. Bcl-XL interacts with Apaf-1 and inhibits Apaf-1-dependent caspase-9 activation. Proc. Natl. Acad. Sci. USA 1998; 95:4386-91.