PRODUCT INFORMATION



Apaf-1 Polyclonal Antibody

Item No. 160780

Overview and Properties

This vial contains 200 µl of peptide affinity-purified polyclonal antibody. Contents:

Synonym: Apoptosis Protease-Activating Factor 1

Immunogen: Synthetic peptide from an N-terminal region of human Apaf-1

Species Reactivity: (+) Human and mouse

Uniprot No.: 014727 Form: Liquid

-20°C (as supplied) Storage:

Stability: ≥1 year

Storage Buffer: PBS, pH 7.2, with 0.02% sodium azide

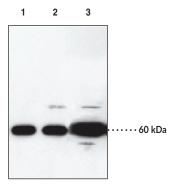
Host:

Western blot (WB); the recommended starting dilution is 1:1,000-1:2,000. A whole Applications:

> cell lysate from HeLa cells can be used as a positive control and a 130 kDa band should be detected. Other applications were not tested, therefore optimal working

concentration/dilution should be determined empirically.

Image



Lane 1: 293 T-cell lysate

Lane 2: Apaf-1 transfected 293 T-cell lysate

Lane 3: HeLa cell lysate (50 µg)

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Apoptosis is related to many diseases and is 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 homologues of the key cell death gene CED-4 in *C. elegans* has been identified recently from human and mouse and designated Apaf-1 (apoptosis protease-activating factor 1).^{1,2} Apaf-1 binds to cytochrome c (Apaf-2) and caspase-9 (Apaf-3), which leads to caspase-9 activation. Activated caspase-9 in turn cleaves and activates caspase-3, one of the key proteases responsible for the proteolytic cleavage of many key proteins in apoptosis.³ Apaf-1 can also associate with caspase-4 and caspase-8.⁴ Apaf-1 is ubiquitously expressed in human tissues.¹

References

- 1. Zou, H., Henzel, W.J., 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* **90(3)**, 405-413 (1997).
- 2. Cecconi, F., Alvarez-Bolado, G., Meyer, B.I., et al. Apaf1 (CED-4 homolog) regulates programed cell death in mammalian development. *Cell* **94(6)**, 727-737 (1998).
- 3. 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* **91(4)**, 479-489 (1997).
- 4. Hu, Y., Benedict, M.A., Wu, D., et al. Bcl-XL interacts with Apaf-1 and inhibits Apaf-1-dependent caspase-9 activation. *Proc. Natl. Acad. Sci USA* **95(8)**, 4386-4391 (1998).

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