

Technical Data Sheet

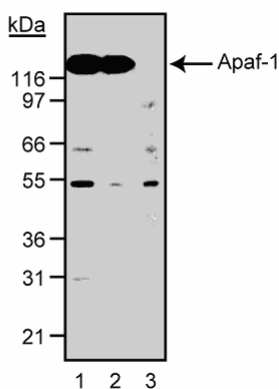
Polyclonal Rabbit Anti- APAF-1

Product Information

Material Number:	559683
Alternate Name:	Apoptosis Protease Activating Factor-1
Size:	50 µg
Concentration:	0.5 mg/ml
Immunogen:	Human APAF-1 aa. 12-28 Peptide
Isotype:	Rabbit Ig
Reactivity:	QC Testing: Human Reported: Mouse
Target MW:	130 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Apoptosis can be induced by a family of cell death receptors (tumor necrosis factor) and their respective ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. Another mechanism of inducing apoptosis involves the participation of the mitochondria in which various forms of cellular stress can trigger the release of cytochrome c from the intermembrane space (IMS) of the mitochondria into the cytoplasm. The mammalian homologue of the CED-4 cell death gene in *C. elegans* has been identified from human and mouse and designated APAF-1 (for Apoptosis Protease Activating Factor-1). Cytochrome c associates with APAF-1 in the presence of dATP or ATP and induces an oligomerization of APAF-1 which then binds procaspase-9, forming an “apoptosome” containing APAF-1, cytochrome c and procaspase-9. Recent studies have shown that dATP/ATP hydrolysis is necessary for APAF-1 to interact with cytochrome c and bind to procaspase-9. Procaspase-9 is then processed via an intrinsic autocatalytic activity of itself, triggered by APAF-1, which now allows caspase-9 to activate the downstream executioners caspase-3, -6 and -7. This antibody has been reported to recognize both human and mouse APAF-1. A peptide corresponding to amino acids 12 to 28 of human APAF-1 was used as the immunogen where the sequence of this peptide have been reported to be identical between both human and mouse.



Western blot analysis of APAF-1. HeLa cell lysates (Human cervical epitheloid carcinoma; ATCC CCL-2.2) were probed with the polyclonal rabbit anti- APAF-1 antibody at a concentration of 0.5 µg/ml (lane 1), 0.25 µg/ml (lane 2) or in the presence of blocking peptide (lane 3). APAF-1 is identified as a band migrating at ~ 130 kDa on HeLa cell lysates.

Preparation and Storage

The polyclonal antibody was purified from antiserum by affinity chromatography.
Store undiluted at 4° C.

Application Notes

Application

Western blot

Routinely Tested

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554021	HRP Goat Anti-Rabbit Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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