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Bak Antibody (BH3 Domain Specific)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1301a

Specification

Bak Antibody (BH3 Domain Specific) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q16611
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**56-91**

Bak Antibody (BH3 Domain Specific) - Additional Information

Gene ID 578

Other Names
Bcl-2 homologous antagonist/killer, Apoptosis regulator BAK, Bcl-2-like protein 7, Bcl2-L-7, BAK1, BAK, BCL2L7, CDN1

Target/Specificity
This Bak antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-91 amino acids from human Bak.

Dilution
IHC-P~~1:50~100
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Bak Antibody (BH3 Domain Specific) is for research use only and not for use in diagnostic or therapeutic procedures.

Bak Antibody (BH3 Domain Specific) - Protein Information

Name BAK1

Synonyms BAK, BCL2L7, CDN1

Function Plays a role in the mitochondrial apoptotic process. Upon arrival of cell death signals, promotes mitochondrial outer membrane (MOM) permeabilization by oligomerizing to form pores within the MOM. This releases apoptogenic factors into the cytosol, including cytochrome c, promoting the activation of caspase 9 which in turn processes and activates the effector caspases.

Cellular Location
Mitochondrion outer membrane; Single-pass membrane protein

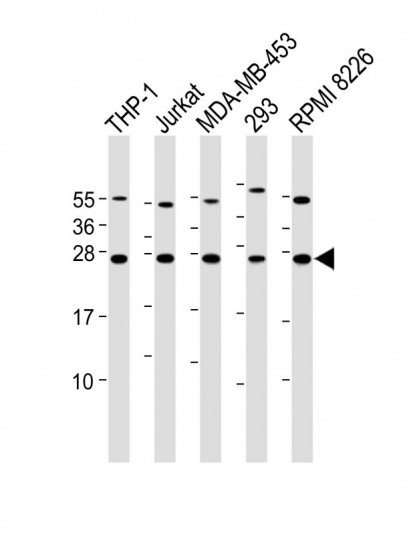
Tissue Location
Expressed in a wide variety of tissues, with highest levels in the heart and skeletal muscle

Bak Antibody (BH3 Domain Specific) - 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

Bak Antibody (BH3 Domain Specific) - Images



All lanes : Anti-hBak-BH3 at 1:2000 dilution Lane 1: THP-1 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: MDA-MB-453 whole cell lysate Lane 4: 293 whole cell lysate Lane 5: RPMI 8226 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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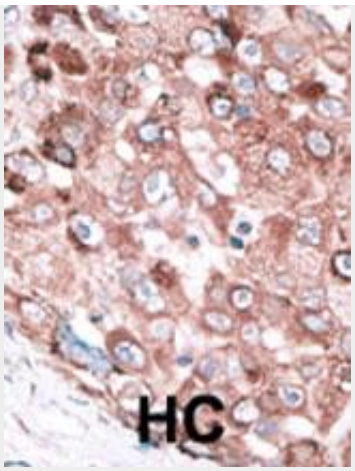

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Bak Antibody (BH3 Domain Specific) - Background

BAK belongs to the BCL2 protein family. BCL2 family members form oligomers or heterodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. BAK localizes to mitochondria, and functions to induce apoptosis. It interacts with and accelerates the opening of the mitochondrial voltage-dependent anion channel, which leads to a loss in membrane potential and the release of cytochrome c. This protein also interacts with the tumor suppressor P53 after exposure to cell stress.

Bak Antibody (BH3 Domain Specific) - References

Cartron, P.F., et al., Mol. Cell. Biol. 23(13):4701-4712 (2003).
Mikhailov, V., et al., J. Biol. Chem. 278(7):5367-5376 (2003).
Werner, A.B., et al., J. Biol. Chem. 277(25):22781-22788 (2002).
Bellosillo, B., et al., Blood 100(5):1810-1816 (2002).
Grutkoski, P.S., et al., Shock 17(1):47-54 (2002).

Bak Antibody (BH3 Domain Specific) - Citations

- Probing BAK and BAX Activation and Pore Assembly with Cytochrome c Release, Limited Proteolysis, and Oxidant-Induced Linkage.
- In vitro cytotoxic effect of proteasome inhibitor bortezomib in combination with purine nucleoside analogues on chronic lymphocytic leukaemia cells.