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Bak Antibody

Catalog # ASC10253

Product Information

Application	WB, ICC, E
Primary Accession	Q16611
Other Accession	Q16611, 2493274
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23409
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Bak antibody can be used for detection of Bak by Western blot at 1 to 2 g/mL. Antibody can also be used for immunocytochemistry starting at 2 g/mL.

Additional Information

Gene ID	578
Other Names	Bak Antibody: BAK, CDN1, BCL2L7, BAK-LIKE, BAK, Apoptosis regulator BAK, Bcl2-L-7, BCL2-antagonist/killer 1
Target/Specificity	BAK1;
Reconstitution & Storage	Bak antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Bak Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

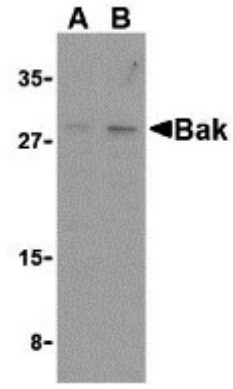
Background

Bak Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. The Bcl-2 family of proteins is comprised of critical regulators of apoptosis that can be divided into two classes: those that inhibit apoptosis and those that promote cell death. Bak, a pro-apoptotic Bcl-2 family member, is an oligomeric protein that localizes to the mitochondria. It is thought to share significant functional homology with Bax, another pro-apoptotic Bcl-2 family member, as disruption of bak or bax has little effect on cell death, but mice lacking both genes display multiple developmental defects and cells lacking bak and bax show decreased apoptotic capability.

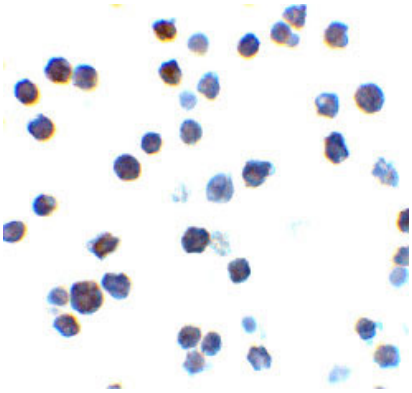
References

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7.
Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene 2003; 22:8590-607.
Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron. 2004; 39:1125-35.
Kiefer M, Brauer MJ, Powers VC, et al. Modulation of apoptosis by the widely distributed Bcl-2 homologue Bak. Nature 1995; 374:736-9.

Images



Western blot analysis of Bak in L1210 cell lysates with Bak antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of Bak in L1210 cells with Bak antibody at 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.