

Basic Information

Product Name	Anti-BAK/BAK1 Antibody (Clone#4C2)	
Gene Name	BAK1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human BAK/BAK1 recombinant protein (Position: A22-S211). Human BAK shares 78.3 % amino acid (aa) sequence identity with mouse BAK.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	23-25 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

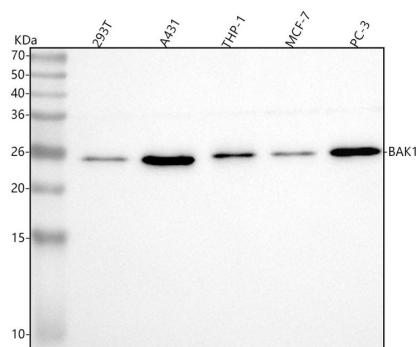
BAK, officially called Bcl2 antagonist killer, is a protein that in humans, encoded by the BAK gene. The BAK protein is a pro-apoptotic member of the Bcl-2 gene family which is involved in initiating apoptosis. BAK gene spans 7.6 kb and contains 6 exons. By Southern blot analysis of genomic DNA from human/rodent somatic cell hybrids, BAK gene is localized to chromosome 6. This protein 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. This protein also interacts with the tumor suppressor P53 after exposure to cell

stress.

Reference

Anti-BAK/BAK1 Antibody (Clone#4C2)被引用在2文献中。

Selected Validation Data



Western blot analysis of anti-BAK/BAK1 antibody (M01163-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human A431 whole cell lysates,

Lane 3: human THP-1 whole cell lysates,

Lane 4: human MCF-7 whole cell lysates,

Lane 5: human PC-3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-BAK/BAK1

antigen affinity purified monoclonal antibody (M01163-1) at a

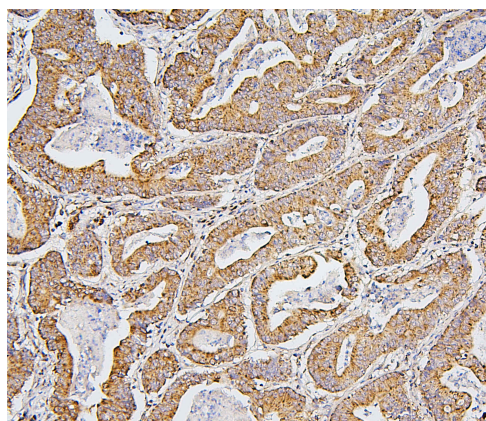
dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP

secondary antibody (Catalog # BA1050). The signal is developed

using ECL Plus Western Blotting Substrate (Catalog # AR1197). A

specific band was detected for BAK/BAK1 at approximately 25 kDa.

The expected band size for BAK/BAK1 is at 23 kDa.



IHC analysis of BAK/BAK1 using anti-BAK/BAK1 antibody (M01163-1).

BAK/BAK1 was detected in a paraffin-embedded section of human

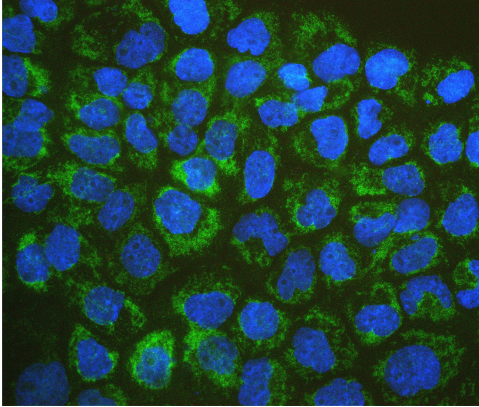
intestinal cancer tissue. Biotinylated goat anti-mouse IgG was used

as secondary antibody. The tissue section was incubated with mouse

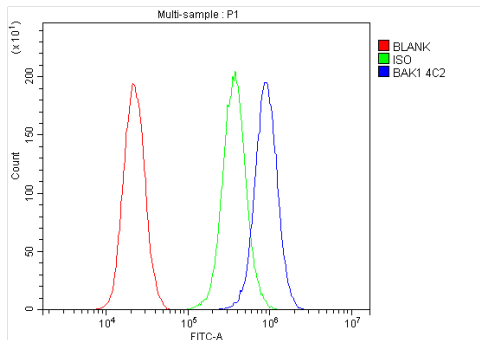
anti-BAK/BAK1 Antibody (M01163-1) at a dilution of 1:200 and

developed using Streptavidin-Biotin-Complex (SABC) (Catalog #

SA1021) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of BAK1 using anti-BAK1 antibody (M01163-1). BAK1 was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/mL mouse anti-BAK1 Antibody (M01163-1) overnight at 4°C. Fluoro488 Conjugated Goat Anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of PC-3 cells using anti-BAK/BAK1 antibody (M01163-1).

Overlay histogram showing PC-3 cells stained with M01163-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-BAK/BAK1 Antibody (M01163-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.