Datasheet for ABIN967537

anti-BAX antibody (N-Term)

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Overview

Quantity:	0.1 mg
Target:	BAX
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This BAX antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Brand:	BD Pharmingen™
Immunogen:	N-terminal peptide sequence
Clone:	6A7
Isotype:	IgG1 kappa
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. 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.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	BAX
Alternative Name:	Bax (BAX Products)
Background:	The Bcl-2 family members are involved in mediating programmed cell death or apoptosis, and share two highly conserved functional regions, Bcl-2 homology 1 and 2 (BH1 and BH2). Several of the family members including Bcl-2 act as inhibitors of apoptosis, whereas others such as Bax promote cell death. It is thought that protein-protein interactions between Bcl-2 family members play an important role in their function. For example, Bax may form homodimers or heterodimers with either Bcl-2 and Bcl-XL (long). Bax homodimers is thought to promote cell death, whereas Bax heterodimerization with either Bcl-2 and Bcl-XL appears to block cell death. When Bax is present in excess, it can counteract the ability of Bcl-2 to inhibit cell death. Bax expression has been identified in a variety of tissues, including lung, stomach, kidney, thymus, lymph nodes, bone marrow, spleen, heart, exocrine pancreas, and brain. Liver, kidney, and the exocrine pancreas have been found to contain little or no Bcl-2. The Bax gene potentially encodes three different proteins Bax-alpha (21 kDa), Bax-beta (24 kDa) and Bax-gamma (5 kDa). Bax-alpha is the most common transcript. The 6A7 antibody recognizes human, mouse and rat Bax. The 6A7 antibody reacts with an epitope between amino acids 12-24 of Bax, and studies suggest that this epitope may be in the vicinity of the dimerization domain of Bax. It has been proposed that the 6A7 antibody may directly compete with either Bcl-2 or Bcl-XL for binding to Bax. In western blots, the 6A7 antibody typically detects Bax as a single band of 21-22 kDa, thought to be Bax-alpha.
Molecular Weight:	21-22 kDa
Pathways:	p53 Signaling, PI3K-Akt Signaling, Apoptosis, Caspase Cascade in Apoptosis, Positive Regulation of Endopeptidase Activity, Unfolded Protein Response

Application Details

Application Notes:	Applications include western blot analysis (1-2 µg/ml) and immunoprecipitation. Daudi B lymphoma cells (ATCC CCL-213) and rat thymocytes are suggested as positive controls for western blot analysis. Due to low level of Bax expression in Hela cells, we do not recommend Hela as a positive control.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

Hsu, Wolter, Youle: "Cytosol-to-membrane redistribution of Bax and Bcl-X(L) during apoptosis." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 94 , Issue 8, pp. 3668-72, (1997) (PubMed).

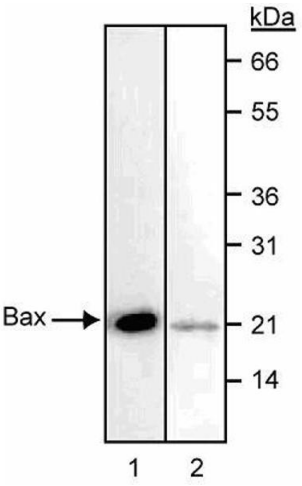
Hsu, Youle: "Nonionic detergents induce dimerization among members of the Bcl-2 family." in: **The Journal of biological chemistry**, Vol. 272, Issue 21, pp. 13829-34, (1997) (PubMed).

Krajewski, Krajewska, Shabaik, Miyashita, Wang, Reed: "Immunohistochemical determination of in vivo distribution of Bax, a dominant inhibitor of Bcl-2." in: **The American journal of pathology**, Vol. 145, Issue 6, pp. 1323-36, (1995) (PubMed).

Reed: "Bcl-2 and the regulation of programmed cell death." in: **The Journal of cell biology**, Vol. 124, Issue 1-2, pp. 1-6, (1994) (PubMed).

Yin, Oltvai, Korsmeyer: "BH1 and BH2 domains of Bcl-2 are required for inhibition of apoptosis and heterodimerization with Bax." in: **Nature**, Vol. 369, Issue 6478, pp. 321-3, (1994) (PubMed).

There are more publications referencing this product on: Product page



Western Blotting

Image 1. Western blot analysis of Bax. Lysates from Daudi human B cells (lane 1) and mouse thymocytes (lane 2) were probed with anti-Bax (clone 6A7, ABIN967537) Clone 6A7 identifies Bax as an ~21 kDa band.

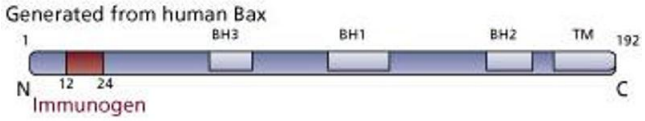
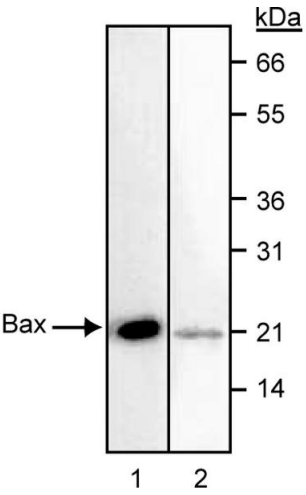


Image 2.



Western Blotting

Image 3.