

Technical Data Sheet

Purified Mouse Anti-Bax

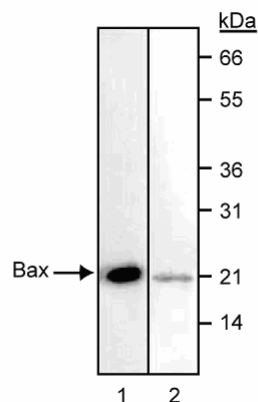
Product Information

Material Number:	556467
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	6A7
Immunogen:	N-terminal peptide sequence
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	21-22 kDa
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

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- α (21 kDa), Bax- β (24 kDa) and Bax- γ (5 kDa). Bax- α 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- α .



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, Cat. No. 556467) Clone 6A7 identifies Bax as an ~21 kDa band.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Reported

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Recommended Assay Procedure:

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.

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols 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.

References

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- Yin XM, Oltvai ZN, Korsmeyer SJ. BH1 and BH2 domains of Bcl-2 are required for inhibition of apoptosis and heterodimerization with Bax. *Nature*. 1994; 369(6478):321-323. (Biology)