

## Technical Data Sheet

## Purified Mouse Anti-Bax

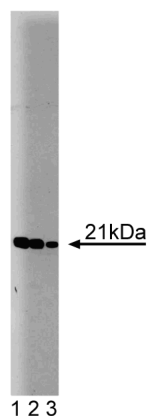
## Product Information

Material Number:	610982
Size:	50 µg
Concentration:	250 µg/ml
Clone:	3/Bax
Immunogen:	Human Bax-α aa. 55-178
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Dog
Target MW:	21 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

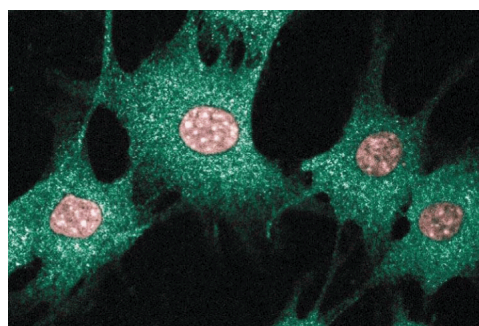
## Description

Proper development and maintenance of homeostasis within tissues is achieved through cell proliferation, differentiation, and apoptosis. Members of the Bcl-2 protein family function to either inhibit (Bcl-2 and Bcl-XL) or promote (Bax and Bak) apoptosis. Similar to other family members, Bax contains the conserved Bcl-2 homology 1 (BH1) and 2 (BH2) domains which allow for its homodimerization or heterodimerization with Bcl-2. Although Bax alone does not induce cell death, elevated levels of Bax accelerate apoptosis following a death signal such as cytokine deprivation or Fas/Fas ligand interaction. The ratio of Bax homodimers to Bax/Bcl-2 heterodimers is an apoptotic checkpoint. When Bcl-2 is in excess, apoptosis is inhibited. However, if Bax levels increase in response to a death signal, the cell is pushed toward death. Bax function is also affected by Bax Inhibitor-1 (BI-1). Although it interacts directly with Bcl-2 and not Bax, BI-1 can suppress Bax-induced apoptosis. Alternative splicing of Bax mRNA produces Bax-α, the integral membrane form, and the two cytosolic forms β and γ. These isoforms are thought to allow for differential regulation of Bax activity and localization.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



**Western blot analysis of Bax on a HepG2 cell lysate (Human hepatocellular carcinoma; ATCC HB-8065).**  
Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-Bax antibody.



**Immunofluorescence staining of BC3H1 cells (Mouse brain smooth muscle-like cells; ATCC CRL-1443).**

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## Preparation and Storage

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

Store undiluted at -20° C.

## Application Notes

### Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Tested During Development

### Recommended Assay Procedure:

**Western blot:** Please refer to [http://www.bdbiosciences.com/pharmingen/protocols/Western\\_Blotting.shtml](http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml)

## Suggested Companion Products

Catalog Number	Name	Size	Clone
611555	HepG2 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

## 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](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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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Oltvai ZN, Millman CL, Korsmeyer SJ. Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death. *Cell*. 1993; 74(4):609-619.(Biology)  
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Xu Q, Reed JC. Bax inhibitor-1, a mammalian apoptosis suppressor identified by functional screening in yeast. *Mol Cell*. 1998; 1(3):337-346.(Biology)