Performance guarenteed

# Bax Monoclonal Antibody (6A7), eBioscience™

#### **Product Details**

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Size	100 µg
Species Reactivity	Human, Mouse, Non-human primate, Rat
Published Species	Rat, Non-human primate, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Туре	Antibody
Clone	6A7
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_468389

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	8 Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	-	2 Publications
Immunoprecipitation (IP)	-	2 Publications

#### **Product Specific Information**

Description: The 6A7 antibody reacts with mouse, rat, monkey and human Bax (20 kDa). The 6A7 antibody shows no crossreaction with Bcl-2 or Bcl-xL proteins. Bcl-2, Bax, and Bcl-xL are members of a protein family that regulates apoptosis; while several family members including Bcl-2 and Bcl-xL inhibit apoptosis, overexpression of Bax promotes programmed cell death. A human Bax protein peptide sequence, aa 12-24, was used as immunogen.

Applications Reported: The 6A7 antibody has been reported for use in immunoblotting (WB).

Applications Tested: The 6A7 antibody has been tested by Western Blot and can be used at approximately 1 µg/mL. It is recommended that the reagent be carefully titrated for optimal performance in the assay of interest.

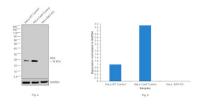
Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

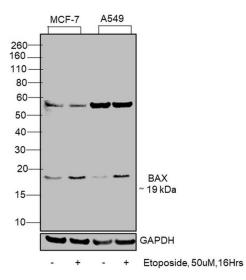
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# Product Images For Bax Monoclonal Antibody (6A7), eBioscience™



#### Bax Antibody (14-6997-82)

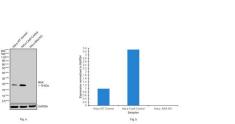
Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in Bax KO cell line compared to control cell line using Anti-Bax Monoclonal Antibody (6A7), eBioscience<sup>™</sup> (Product # 14-6997-82). {KO}



#### Bax Antibody (14-6997-82) in WB

Western blot was performed using Anti-Bax Monoclonal Antibody (6A7), eBioscience<sup>™</sup>(Product # 14-6997-82) and a 19kDa band corresponding to Bax was observed across cell lines tested. Whole cell extracts (30 µg lysate) of MCF7 (Lane 1), MCF7 treated with etoposide (50uM,16 Hrs.) (Lane 2), A549 (Lane 3), A549 treated with etoposide (50uM,16 Hrs.) (Lane 4) were electrophoresed using NuPAGE<sup>™</sup> 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 Dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal<sup>™</sup> Recombinant Secondary Antibody, HRP (Product # A28177,1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). Expression of BAX was found to be up regulated upon etoposide treatment in A549 and MCF-7 cells.

#### Bax Antibody (14-6997-82) in WB



Knockout of BAX was achieved by CRISPR-Cas9 genome editing using LentiArray<sup>™</sup> Lentiviral sgRNA (Product # A32042, Assay ID CRISPR612938\_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Western blot analysis of BAX was performed by loading 50 µg of HeLa Wild Type (Lane 1), HeLa Cas9 (Lane 2) and HeLa BAX KO (Lane 3) whole cell extracts. The samples were electrophoresed using Novex<sup>™</sup> 16%, Tricine, 1.0 mm, Mini Protein Gel (Product # EC66952BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Anti-Bax Monoclonal Antibody (6A7), eBioscience™ (Product # 14-6997-82, 1:500 dilution) and Goat anti-Mouse IgG (H+L) Superclonal<sup>™</sup> Recombinant Secondary Antibody, HRP (Product # A28177, 1:5,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal<sup>™</sup> West Dura Extended Duration Substrate (Product # 34076). Loss of signal upon CRISPR mediated knockout (KO) using the LentiArray™ CRISPR product line confirms that antibody is specific to BAX.

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## **□** 13 References

## Western Blot (8)

Iranian journal of biotechnology	Year
MiRNA-106a-5p Promotes Laryngeal Carcinoma Proliferation and	2023 <b>Species</b> Human
Migration Through PI3K/AKT/m-TOR Pathway by AKTIP.	
"14-6997-82 was used in Western Blotting to uncover a new mechanism, that miR-106a-5p promotes LC development via AKTIP/PI3K/AKT/m-TOR axis, which guides clinical management and drug discovery."	
Authors: Gong L,Wang XF,Liu H,Li L	
Oxidative medicine and cellular longevity	Year
Protective Effect of Photobiomodulation against Hydrogen Peroxide-	2022
Induced Oxidative Damage by Promoting Autophagy through Inhibition	2022
Protective Effect of Photobiomodulation against Hydrogen Peroxide- Induced Oxidative Damage by Promoting Autophagy through Inhibition of PI3K/AKT/mTOR Pathway in MC3T3-E1 Cells.	2022
Induced Oxidative Damage by Promoting Autophagy through Inhibition	2022

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## Immunocytochemistry (1)

The Cytoplasmic DNA Sensor cGAS Promotes Mitotic Cell Death. "14-6997 was used in Immunocytochemistry-Immunofluorescence to study the role of cGAS and IRF3 in triggering	2019
mitotic cell death."	<b>Species</b> Human
Authors: Zierhut C,Yamaguchi N,Paredes M,Luo JD,Carroll T,Funabiki H	

#### Flow Cytometry (2)

The Journal of biological chemistry	Year
Caspase inhibition blocks cell death and results in cell cycle arrest in	2007
cytokine-deprived hematopoietic cells.	Species
"14-6997 was used in Flow cytometry/Cell sorting to investigate the effect of caspase inhibition in cytokine-deprived hematopoietic cells."	Mouse
Authors: Brown NM.Martin SM.Maurice N.Kuwana T.Knudson CM	

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