# abcam

#### Product datasheet

## Anti-Bim antibody [Y36] - BSA and Azide free ab170589





#### 2 References 10 Images

#### Overview

**Product name** Anti-Bim antibody [Y36] - BSA and Azide free

**Description** Rabbit monoclonal [Y36] to Bim - BSA and Azide free

**Host species** Rabbit

Specificity Based on the sequence homology of the immunogen, this antibody is likely to detect all Bim

**Tested applications** Suitable for: IP, IHC-P, WB, Flow Cyt (Intra), ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**General notes** ab170589 is the carrier-free version of ab32158.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer Constituent: PBS

Carrier free Yes

Purity Protein A purified

**Clonality** Monoclonal

Clone number Y36
Isotype IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab170589 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa). Please check the parent abID, <u>ab32158</u> , for a recommended dilution.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

#### **Target**

Function Induces apoptosis. Isoform BimL is more potent than isoform BimEL. Isoform Bim-alpha1,

isoform Bim-alpha2 and isoform Bim-alpha3 induce apoptosis, although less potent than the

isoforms BimEL, BimL and BimS. Isoform Bim-gamma induces apoptosis.

**Tissue specificity** Isoform BimL and isoform BimS are the predominant isoforms and are

ubiquitously expressed with a tissue-specific variation. Isoform Bim-gamma is most abundantly

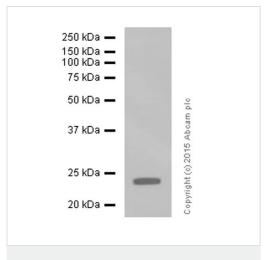
expressed in small intestine and colon, and in lower levels in spleen, prostate, testis, heart, liver

and kidney.

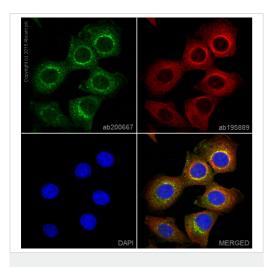
Sequence similarities Belongs to the Bcl-2 family.

**Domain** The BH3 motif is required for Bcl-2 binding and cytotoxicity.

**Cellular localization** Mitochondrion and Endomembrane system. Associated with intracytoplasmic membranes.



Western blot - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)



Immunocytochemistry/ Immunofluorescence - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

Anti-Bim antibody [Y36] - BSA and Azide free (ab170589) + A431 (human epidermoid carcinoma) whole cell lysate at 10 µg

#### **Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051)

Predicted band size: 22 kDa

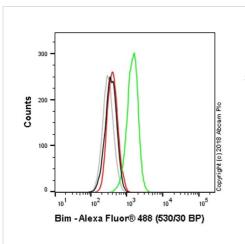
Exposure time: 3 minutes

Blocking buffer and concentration: 5% NFDM/TBST Diluting buffer and concentration: 5% NFDM/TBST

Clone Y36 (ab170589) has been successfully conjugated by Abcam. This image was generated using Anti-Bim antibody [Y36] (Alexa Fluor® 488). Please refer to <a href="mailto:ab200667">ab200667</a> for protocol details.

<u>ab200667</u> staining Bim in MCF7 cells. The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with <u>ab200667</u> at 1/200 dilution (shown in green) and <u>ab195889</u>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 594), at 2μg/ml (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

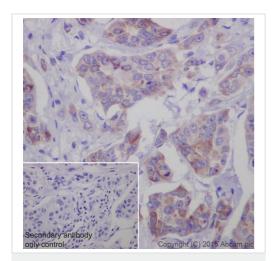
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-BCL2L11 knockout cells (red line) stained with <u>ab32158</u>. The cells were fixed 80% methanol (5 min), and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (<u>ab32158</u>, 1µg/ml) for 30 min at 22°C. The secondary antibody used was Alexa Fluor<sup>®</sup> 488 goat anti-rabbit lgG (H&L) presorbed (<u>ab150081</u>) at 1/2000 dilution for 30 min at 22°C. A rabbit lgG1 isotype control antibody (<u>ab172730</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-BCL2L11 knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity). Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

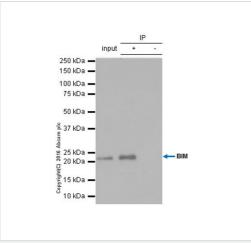
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

ab32158 staining Bim in human breast cancer tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Antigen retrieval was by heat mediated antigen retrieval using Tris/EDTA Buffer, PH9 (ab93684). Samples were incubated with primary antibody (1/100 in blocking buffer) and a Biotin-conjugated Donkey anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody. Cytoplasmic staining can be seen in the human breast cancer cells. Hematoxylin was used as a counter stain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).



Immunoprecipitation - Anti-Bim antibody [Y36] -BSA and Azide free (ab170589)



Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32158 in Raji whole cell lysate.

Ab32158 at 1/50 immunoprecipitating Bim in Raji (human Burkitt's

lymphoma) whole cell lysate.

Lane 1 (input): Raji whole cell lysate (10µg)

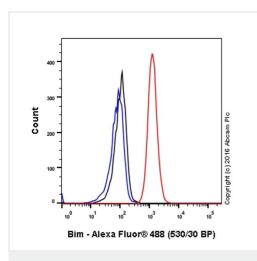
Lane 2 (+): ab32158 + Raji whole cell lysate.

For western blotting, ab32158 (1/1000) was used as the primary antibody and VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

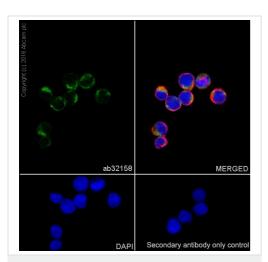
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).



Flow Cytometry (Intracellular) - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

Intracellular Flow Cytometry analysis of Raji (human Burkitt's lymphoma) whole cell lysate labeling Bim with ab32158 at 1/100 (red). Cells were fixed with 4% paraformaldehyde. An Alexa Fluor® 488)-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG (ab172730). Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).

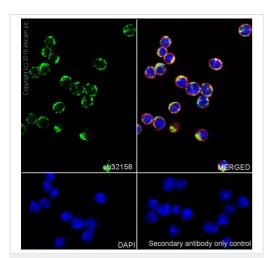


Immunocytochemistry/ Immunofluorescence - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

Immunocytochemistry/Immunofluorescence analysis of Raji (Human Burkitt's lymphoma cell line) labeling Bim with <u>ab32158</u> at a dilution of 1/250. Cells were fixed with 100% methanol. Ab150077 (1/1000) was used as the secondary antibody. Cells were co-stained with <u>ab7291</u>, a mouse anti-tubulin antibody (1/200) using <u>ab150120</u> as the secondary. Nuclei were counterstained with DAPI (blue).

Secondary antibody only control, cells without incubation with the primary antibody was used as negative control.

Confocal image showing cytoplasmic staining on Raji cell line
This data was developed using the same antibody clone in a
different buffer formulation containing PBS, BSA, glycerol, and
sodium azide (ab32158).



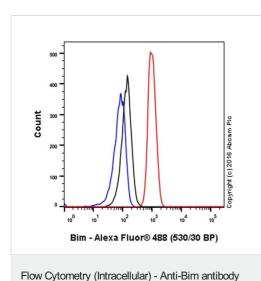
Immunocytochemistry/ Immunofluorescence - Anti-Bim antibody [Y36] - BSA and Azide free (ab170589)

Immunocytochemistry/Immunofluorescence analysis of A20 (Mouse reticulum sarcoma cell line) labeling Bim with <u>ab32158</u> at a dilution of 1/250. Cells were fixed with 100% methanol. Ab150077 (1/1000) was used as the secondary antibody. Cells were co-stained with <u>ab7291</u>, a mouse anti-tubulin antibody (1/200) using <u>ab150120</u> as the secondary. Nuclei were counterstained with DAPI (blue).

Secondary antibody only control, cells without incubation with the primary antibody was used as negative control.

Confocal image showing cytoplasmic staining on A20 cell line

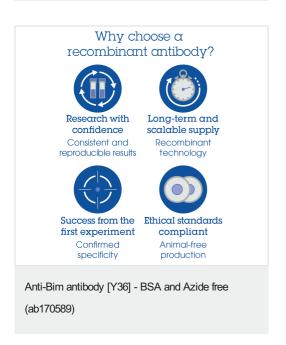
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).



[Y36] - BSA and Azide free (ab170589)

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labelling Bim with <u>ab32158</u> at 1/50 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. An Alexa Fluor<sup>®</sup>488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32158).



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