abcam

ab247217

Anti-Bid antibody [Y8] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	Y8
Purification technique	Affinity purification Protein A
Specificity	This antibody does not cross-react with other Bcl-2 family members.
Concentration	1.034 - 1.04 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information BID

Function	Induces caspases and apoptosis (PubMed:14583606). Counters the protective effect of BCL2 (By similarity). BH3-interacting domain death agonist p15. Induces caspase activation and apoptosis (PubMed:15661737, PubMed:32029622). Translocates to mitochondria following cleavage and disrupts the outer mitochondrial membrane leading to the release of cytochrome c (PubMed:10480954, PubMed:32029622, PubMed:9727491). Isoform 1. Induces ICE-like proteases and apoptosis. Isoform 2. Induces ICE-like proteases and apoptosis. Isoform 3. Does not induce apoptosis. Isoform 4. Induces ICE-like proteases and apoptosis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab247217 is the carrier-free version of ab32060.

Species reactivity

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology

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

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based 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.

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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Bid also known as BH3-interacting domain death agonist or BID protein functions as a pro-apoptotic member of the Bcl-2 protein family. This protein plays a significant role in the apoptotic process by helping to mediate the release of cytochrome c from mitochondria an important step in this cell death pathway. Bid exists in cells as an inactive uncleaved form but upon activation a caspase cleaves it into a truncated form tBID. The molecular weight of Bid is approximately 22 kDa. It is commonly expressed in numerous tissues throughout the body contributing to its various apoptotic regulatory roles.
Biological function summary	Bid induces mitochondria-mediated apoptosis that significantly affects cellular homeostasis. Bid is not considered to be part of a permanent protein complex; instead it acts as a mobile activator bridging interactions between different proteins within the apoptotic pathway. Upon activation tBID interacts with other Bcl-2 family members like Bax and Bak which leads to mitochondrial membrane permeabilization and subsequent release of cytochrome c.
Pathways	Bid significantly influences apoptotic signaling under different cellular stress conditions. It plays important functions in both intrinsic and extrinsic pathways of apoptosis. Within the intrinsic pathway Bid links the external death receptor signals to the mitochondria-mediated apoptotic pathway. In addition to interacting with Bax and Bak Bid indirectly connects to the apoptosome complex facilitating caspase activation which ultimately results in cellular apoptosis.
Associated diseases and disorders	Bid has strong associations with conditions characterized by deregulated apoptosis such as cancer and neurodegenerative diseases. For instance downregulation or dysfunction of Bid is noted in certain cancer types contributing to the evasion of apoptosis a hallmark of cancer. Moreover in neurodegenerative diseases where excess apoptosis leads to loss of neuronal cells Bid activity has shown to connect with the regulation of apoptosis through its interactions with key apoptotic proteins such as Bcl-2 and Bax. Understanding Bid's role provides potential therapeutic targets to either promote or inhibit apoptotic processes in disease treatment.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

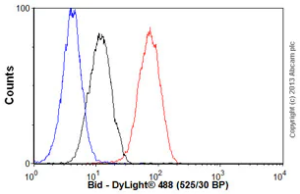
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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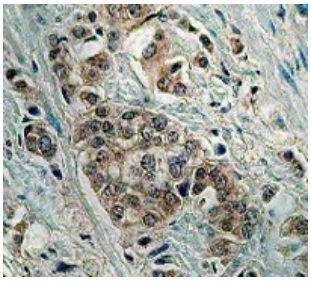
5 product images



Flow Cytometry (Intracellular) - Anti-Bid antibody [Y8] - BSA and Azide free (ab247217)

Bid Flow Cytometry (Intracellular) staining using rabbit Anti-Bid antibody

This data was developed using ab32060, the same antibody clone in a different buffer formulation.Overlay histogram showing HeLa cells stained with ab32060 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32060, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

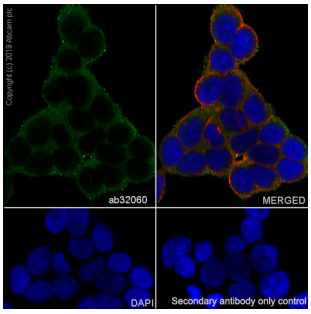


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bid antibody [Y8] - BSA and Azide free (ab247217)

Bid Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Bid antibody

This data was developed using ab32060, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human prostate carcinoma using ab32060 at 1/100 dilution.

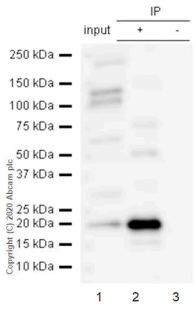
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Bid antibody [Y8] - BSA and Azide free (ab247217)

Bid Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Bid antibody

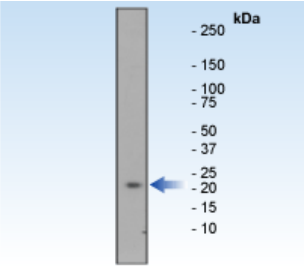
This data was developed using the same antibody clone in a different buffer formulation (ab32060).
Immunocytochemistry analysis of MCF7 (human breast adenocarcinoma epithelial cell) labeling Bid with purified ab32060 at 1/500 dilution (10 µg/ml). Cells were fixed with 100% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/1000 (2 µg/ml) was used as the secondary antibody. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml) was used as counterstain. Nuclei were stained blue with DAPI.
Negative control: PBS instead of the primary antibody.



Immunoprecipitation - Anti-Bid antibody [Y8] - BSA and Azide free (ab247217)

This data was developed using ab32060, the same antibody clone in a different buffer formulation.
Purified ab32060 at 1/50 dilution (2µg) immunoprecipitating Bid in Jurkat whole cell lysate.
Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10µg
Lane 2 (+): ab32060 + Jurkat whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32060 in Jurkat whole cell lysate.
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 22 kDa
All lanes:
Immunoprecipitation - Anti-Bid antibody [Y8] (ab32060)

Predicted band size: 22 kDa



Western blot - Anti-Bid antibody [Y8] - BSA and Azide free (ab247217)

Bid Western blot staining of Jurkat cell lysate using rabbit Anti-Bid antibody

This data was developed using ab32060, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-Bid antibody [Y8] (ab32060) at 1/1000 dilution

All lanes:
Jurkat cell lysate

Predicted band size: 22 kDa

Observed band size: 22 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.