abcam

ab208747

PE Anti-Bcl-XL antibody [E18]

Anti-Bcl-XL antibody [E18] - PE conjugated (ab208747) is a rabbit recombinant monoclonal antibody detecting Bcl-XL in **Flow Cytometry (Intra), Flow Cytometry**. Suitable for **Human**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	E18
Purification technique	Affinity purification Protein A
Specificity	This antibody should recognize Bcl-XL, Bcl-xS and Bcl-x(beta) as the immunogen sequence is common to them. The antibody does not cross-react with other Bcl-2 family members.
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Rat
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Pig
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.

Notes	-

Predicted

Species	Pig
Dilution info	-
Notes	-

ICC/IF

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Pig
Dilution info	-
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Pig
Dilution info	-
Notes	-

Target data

See full target information BCL2L1

Function	Potent inhibitor of cell death. Inhibits activation of caspases. Appears to regulate cell death by blocking the voltage-dependent anion channel (VDAC) by binding to it and preventing the release of the caspase activator, CYC1, from the mitochondrial membrane. Also acts as a regulator of G2 checkpoint and progression to cytokinesis during mitosis. Isoform Bcl-X(L) also regulates presynaptic plasticity, including neurotransmitter release and recovery, number of axonal mitochondria as well as size and number of synaptic vesicle clusters. During synaptic stimulation, increases ATP availability from mitochondria through regulation of mitochondrial membrane ATP synthase F(1)F(0) activity and regulates endocytic vesicle retrieval in hippocampal neurons through association with DMN1L and stimulation of its GTPase activity in synaptic vesicles. May attenuate inflammation impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release (PubMed:17418785). Isoform Bcl-X(S) promotes apoptosis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Do Not Freeze, Store in the dark

Notes

What is this antibody validated in?
PE Anti-Bcl-XL antibody [E18] (ab208747) is a rabbit recombinant monoclonal antibody and is validated for use in Flow Cytometry (Intra), Flow Cytometry (Flow Cyt) in Human samples.

Related products
Antibody clone E18 is also available pre-conjugated to a variety of labels for your convenience – Anti-Bcl-XL PE [E18] (ab208747).

Other related products
We have a range of other formats of antibody clone [E18] also available for your convenience: ab32370, Carrier free - ab199099, HRP - ab200600, PE - ab208747, Alexa Fluor® 647 - ab303457, Alexa Fluor® 555 - ab306571, Alexa Fluor® 750 - ab321595

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.

Supplementary info

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

Activity summary	Bcl-XL also known as Bcl-xL or Bcl-Xl protein is a member of the Bcl-2 protein family playing an important role in regulating cell death. Bcl-XL inhibits apoptosis by binding to pro-apoptotic proteins preventing the release of cytochrome c from mitochondria. This protein has a molecular weight of approximately 30 kDa. Bcl-xL is widely expressed in tissues notably in the brain endothelial cells and hematopoietic tissues where it contributes to cell survival.
Biological function summary	This protein acts as an anti-apoptotic molecule within the mitochondria and is part of the Bcl-2 family complex. Bcl-XL modulates the balance between pro-apoptotic and anti-apoptotic signals impacting cell fate. By binding and sequestering pro-apoptotic members such as Bax and Bak Bcl-XL prevents mitochondrial outer membrane permeabilization important for avoiding programmed cell death. This function not only supports cellular longevity but also understanding cancer cell survival.
Pathways	The Bcl-XL protein holds a significant position in the apoptotic signaling pathways. It is particularly involved in the intrinsic pathway where its interactions with mitochondrial proteins Bax and Bak determine cell survival or death. It is interconnected with the PI3K/AKT pathway where AKT kinase activity can upregulate Bcl-XL expression demonstrating how survival signals are transmitted. These interactions highlight its pivotal role in balancing life and death at the cellular level.
Associated diseases and disorders	Bcl-XL's overexpression often connects to the progression of cancers and resistance to chemotherapy. By inhibiting programmed cell death Bcl-XL allows cancer cells to evade traditional treatments. Furthermore research implicates Bcl-XL in neurodegenerative disorders where its interaction with Bcl-2 proteins disrupts normal apoptotic processes contributing to cellular dysfunction and disease. Understanding Bcl-XL's disease-related roles furthers the development of targeted therapies combating its protective effects in pathological contexts.

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.

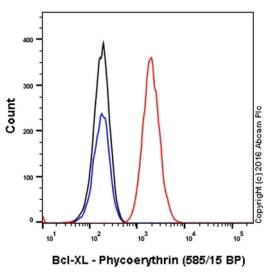
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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3 product images



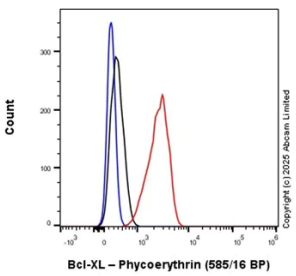
Flow Cytometry (Intracellular) - PE Anti-Bcl-XL antibody [E18] (ab208747)

Bcl-XL Flow Cytometry (Intracellular) staining using rabbit Anti-Bcl-XL antibody

Overlay histogram showing HeLa cells stained with ab208747 (red line). The cells were fixed with 4% formaldehyde (10 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 (ab208747, 1/500 dilution) for 30 min at 22°C.
Isotype control antibody (black line) was rabbit IgG (monoclonal) Phycoerythrin (ab209478) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

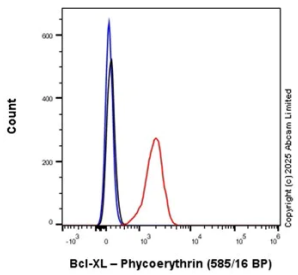
This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Flow Cytometry - PE Anti-Bcl-XL antibody [E18] (ab208747)

Bcl-XL Flow Cytometry staining of NIH/3T3 (mouse embryonic fibroblast) using rabbit Anti-Bcl-XL antibody

Flow cytometric analysis of 4% paraformaldehyde fixed NIH/3T3 (mouse embryonic fibroblast) cells (red line), permeabilized with 90% methanol. Isotype control: rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) (Black). Cell without incubation with primary antibody (Blue).



Flow Cytometry - PE Anti-Bcl-XL antibody [E18] (ab208747)

Bcl-XL Flow Cytometry staining of C6 (rat glial tumor glial cell) using rabbit Anti-Bcl-XL antibody

Flow cytometric analysis of 4% paraformaldehyde fixed C6 (rat glial tumor glial cell) (red line), permeabilized with 90% methanol. Isotype control: rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) (Black). Cell without incubation with primary antibody (Blue).

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