abcam

ab278558

Anti-Bad (phospho S112) antibody [BADS112-B9]

Recombinant | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human BAD pS112. The exact immunogen used to generate this antibody is proprietary information. Database link Q92934
Clone number	BADS112-B9
Purification technique	Affinity purification Protein A/G
Light chain type	lambda

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	0.001-1 µg/mL
Notes	-

Species	Rat

Dilution info	0.001-1 µg/mL
Notes	-

Species	Human
Dilution info	0.001-1 µg/mL
Notes	-

Target data

See full target information BAD pS112

Function	Promotes cell death. Successfully competes for the binding to Bcl-X(L), Bcl-2 and Bcl-W, thereby affecting the level of heterodimerization of these proteins with BAX. Can reverse the death repressor activity of Bcl-X(L), but not that of Bcl-2 (By similarity). Appears to act as a link between growth factor receptor signaling and the apoptotic pathways.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

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

Activity summary	The Bad protein also known as Bcl-2-associated death promoter plays a critical role in apoptosis regulation. It possesses a molecular weight of approximately 23 kDa. Bad is expressed widely in tissues and is a member of the Bcl-2 family of proteins. This family is well-known for its involvement in the regulation of cell death both promoting and inhibiting depending on the protein's interactions.
Biological function summary	Its main role is to promote apoptosis by binding to anti-apoptotic proteins like Bcl-2 and Bcl-XL displacing pro-apoptotic Bax and Bak proteins to trigger cell death. Bad functions as part of the mitochondrial apoptosis pathway and is known to form complexes with phosphorylated proteins. Phosphorylation of Bad by kinases can lead to its sequestration to the cytoplasm reducing apoptosis.
Pathways	Its action is pivotal in the PI3K/Akt signaling pathway. This pathway involves growth factors and cell survival signals where phosphorylation of Bad inhibits its pro-apoptotic activity. Bad interacts with proteins like Akt and 14-3-3 to modulate cell survival. Disruption in its regulation through these pathways may lead to abnormal cell survival or death.
Associated diseases and disorders	Bad has implications in cancer and neurodegenerative diseases. Cancer cells often exhibit impaired apoptotic pathways where overexpression of Bad can ameliorate responsiveness to therapy. In neurodegenerative diseases such as Alzheimer's dysregulation of its function can contribute to cell death. The protein's interaction with Bcl-2 and Bcl-XL is significant in these contexts influencing disease propagation and severity.

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

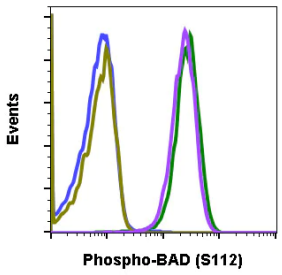
We do not recommend this combination. It is not covered by our product promise.

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.

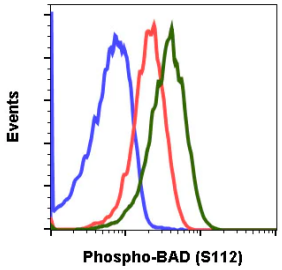
4 product images



Flow Cytometry - Anti-Bad (phospho S112) antibody [BADS112-B9] (ab278558)

Bad (phospho S112) Flow Cytometry staining using rabbit Anti-Bad (phospho S112) antibody

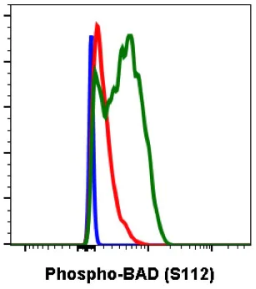
Peptide blocking flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or Calyculin A-treated (green) or CalA and blocked with phospho peptide (gold) or CalA and blocked with non-phospho peptide (purple) using ab278558 at 0.1 µg/mL.



Flow Cytometry - Anti-Bad (phospho S112) antibody [BADS112-B9] (ab278558)

Bad (phospho S112) Flow Cytometry staining using rabbit Anti-Bad (phospho S112) antibody

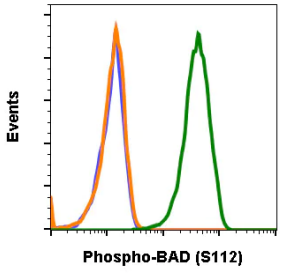
Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with Calyculin A (green) using ab278558 at 0.01µg/mL.



Flow Cytometry - Anti-Bad (phospho S112) antibody [BADS112-B9] (ab278558)

Bad (phospho S112) Flow Cytometry staining using rabbit Anti-Bad (phospho S112) antibody

Flow cytometric analysis of C6 cells secondary antibody only negative control (blue), or treated with imatinib (red) or with pervanadate (green) using ab278558 at 0.08µg/mL.



Flow Cytometry - Anti-Bad (phospho S112) antibody [BADS112-B9] (ab278558)

Bad (phospho S112) Flow Cytometry staining using rabbit Anti-Bad (phospho S112) antibody

ab278558 recognizes basal phosphorylation levels in mouse cells. Flow cytometric analysis of NIH3T3 cells secondary antibody only (blue) or 0.1 µg/mL of isotype control (orange) or of ab278558 (green).

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