abcam

ab224710

Anti-BAFF antibody [EPR22238]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22238
Purification technique	Affinity purification Protein A
Concentration	0.464 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Target data

See full target information TNFSF13B

Function Cytokine that binds to TNFRSF13B/TACI and TNFRSF17/BCMA. TNFSF13/APRIL binds to the same 2 receptors. Together, they form a 2 ligands -2 receptors pathway involved in the stimulation of B- and T-cell function and the regulation of humoral immunity. A third B-cell specific BAFF-receptor (BAFFR/BR3) promotes the survival

of mature B-cells and the B-cell response. Isoform 2 seems to inhibit isoform 1 secretion and bioactivity. Isoform 3. Acts as a transcription factor for its own parent gene, in association with NF-kappa-B p50 subunit, at least in autoimmune and proliferative B-cell diseases. The presence of Delta4BAFF is essential for soluble BAFF release by IFNG/IFN-gamma-stimulated monocytes and for B-cell survival. It can directly or indirectly regulate the differential expression of a large number of genes involved in the innate immune response and the regulation of apoptosis.

Storage

Shipped at conditions	Conditional Ambient
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

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.

Supplementary info

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

Activity summary	BAFF also known as B-cell activating factor or TNFSF13B is a protein important for B-cell survival and maturation. It's a type II transmembrane protein expressed in

	cells like macrophages and dendritic cells and has a mass of approximately 31 kDa. The BAFF protein is also present on activated T-cells and in the serum as a soluble form. It functions as a cytokine and influences various stages of B-cell development.
Biological function summary	BAFF plays a significant role in the humoral immune response by enhancing B-cell proliferation and function. It belongs to the tumor necrosis factor (TNF) ligand family and interacts as a homotrimer. The BAFF cytokine can bind to receptors such as BAFF-R BCMA (B-cell maturation antigen) and TACI (transmembrane activator and CAML interactor). These interactions regulate B-cell homeostasis promoting development and differentiation processes important for normal immune responses.
Pathways	BAFF is central to the regulation of immune system signaling particularly in B-cell receptor (BCR) signaling and NF-kB pathway activation. The BAFF-R mediates B-cell survival signals through the NF-kB pathway while TACI and BCMA associations convey additional immune responses regulation. These multiple pathways ensure the maintenance of B-cell populations and their ability to produce antibodies.
Associated diseases and disorders	BAFF has been linked to conditions such as systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA). Elevated levels of BAFF can exacerbate autoimmune responses due to increased B-cell survival. Connections with these disorders involve the BAFF-R and its influence on excessive B-cell proliferation contributing to disease pathology. Therapeutically anti-BAFF therapies target these interactions to modify disease progression and manage autoimmunity.

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

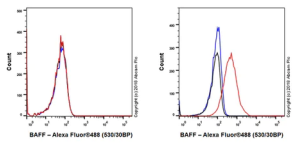
We do not recommend this combination. It is not covered by our product promise.

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

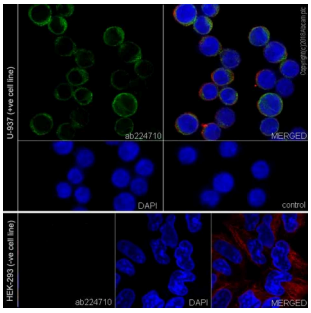


Flow Cytometry - Anti-BAFF antibody [EPR22238] (ab224710)

BAFF Flow Cytometry staining using rabbit Anti-BAFF antibody

Flow cytometric analysis of Daudi (human Burkitt's lymphoma cell line; left panel) and HL-60 (human promyelocytic leukemia cell line ;right panel) cells labeling BAFF with ab224710 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.
Negative control: Daudi. (PMID: 20951740)

Gated on viable cells.



Immunocytochemistry/ Immunofluorescence - Anti-BAFF antibody [EPR22238] (ab224710)

BAFF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-BAFF antibody

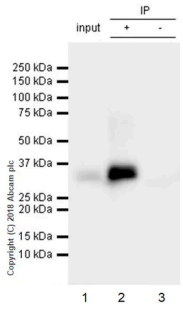
Immunofluorescent analysis of 100% methanol-fixed U937 (human histiocytic lymphoma cell line) cells labeling BAFF with ab224710 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on U937 cells.
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

Confocal image showing membranous staining in U-937 cells.

We don't recommend PFA fixation, since the result shows some background staining in the nuclear.

Negative control: HEK-293 （PMID: 17393395.



Immunoprecipitation - Anti-BAFF antibody [EPR22238] (ab224710)

BAFF was immunoprecipitated from 0.35 mg of U937 (human histiocytic lymphoma cell line) whole cell lysate with ab224710 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab224710 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.
Lane 1: U937 whole cell lysate 10 µg (Input).

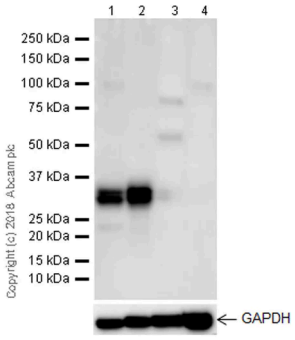
Lane 2: ab224710 IP in U937 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab224710 in U937 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 20 seconds.
All lanes:
Immunoprecipitation - Anti-BAFF antibody [EPR22238] (ab224710)

Predicted band size: 31 kDa



Western blot - Anti-BAFF antibody [EPR22238] (ab224710)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BAFF antibody [EPR22238] (ab224710) at 1/1000 dilution

Lane 1:
U937 (human histiocytic lymphoma cell line) whole cell lysate at 20 µg

Lane 2:
HL-60 (human promyelocytic leukemia cell line) whole cell lysate at 20 µg

Lane 3:
HEK-293 (human epithelial cell line from embryonic kidney) whole cell lysate at 20 µg

Lane 4:
Daudi (human Burkitt's lymphoma cell line) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 31 kDa

Observed band size: 30 kDa, 32 kDa

Exposure time: 26s

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