abcam

ab233752

Anti-BTN2A2/BTF2 antibody [4B11C8]

Mouse Monoclonal BTN2A2/BTF2 antibody. Suitable for Flow Cyt, WB, ICC/IF and reacts with Human samples. Cited in 2 publications. Immunogen corresponding to Recombinant Fragment Protein within Human BTN2A2 aa 50-250.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human BTN2A2 aa 50-250. The exact immunogen used to generate this antibody is proprietary information. Database link Q8WVV5
Clone number	4B11C8
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Target data

See full target information BTN2A2

Function	Inhibits the proliferation of CD4 and CD8 T-cells activated by anti-CD3 antibodies, T-cell metabolism and IL2 and IFNG secretion.

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

Supplementary info

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

Activity summary	The BTN2A2/BTF2 protein also known as Butyrophilin Subfamily 2 Member A2 plays an important role in immune regulation. It has a molecular mass of approximately 57 kDa. BTN2A2 is part of the butyrophilin family and is expressed mainly in immune-related cells including those found in lymphoid tissues. The protein is a transmembrane glycoprotein with a conserved B30.2 domain which is a characteristic feature of the butyrophilin family.
Biological function summary	BTN2A2/BTF2 modulates T cell activity helping to maintain immune tolerance and preventing overactive immune responses. It functions as part of a larger complex that includes various other immunoregulatory proteins. This complex is critical for fine-tuning immune responses by affecting T cell proliferation and cytokine production. Without proper regulation by BTN2A2 there can be an increased risk of autoimmunity and immune dysregulation.
Pathways	BTN2A2/BTF2 involvement is essential within the immune checkpoint pathways particularly those influencing T cell regulation. It interacts closely with the PD-1 pathway which is significant in mediating immune inhibitory signals. Furthermore BTN2A2 has relationships with other proteins in these pathways such as CTLA-4 which is another key player in maintaining immune balance.
Associated diseases and disorders	BTN2A2/BTF2 is implicated in autoimmune conditions like rheumatoid arthritis where the immune system attacks healthy tissue. The dysregulation of BTN2A2 might exacerbate these conditions. It also shows associations with inflammatory bowel disease (IBD) where improper immune regulation plays a central role. BTN2A2's interaction with proteins like PD-1 in these diseases suggests potential therapeutic targets for modulating immune responses and improving patient outcomes.

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.

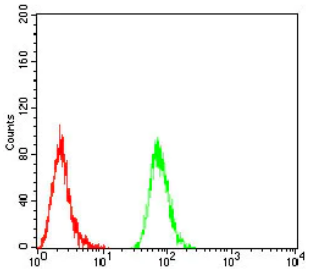
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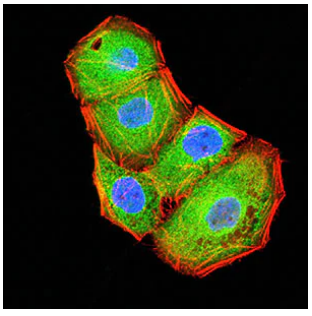
2 product images



Flow Cytometry - Anti-BTN2A2/BTF2 antibody [4B11C8] (ab233752)

BTN2A2/BTF2 Flow Cytometry staining using mouse Anti-BTN2A2/BTF2 antibody

Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling BTN2A2/BTF2 with ab233752 at 1/200 dilution (green) compared with a negative control (red).



Immunocytochemistry/ Immunofluorescence - Anti-BTN2A2/BTF2 antibody [4B11C8] (ab233752)

BTN2A2/BTF2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-BTN2A2/BTF2 antibody

HeLa (human prostate adenocarcinoma cell line) cells stained for BTN2A2/BTF2 (green) using ab233752 at 1/200 dilution in ICC/IF.
Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.

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