abcam

ab183023

Anti-NFAT2 (phospho S237) antibody [EPR2377(N)]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 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	EPR2377(N)
Purification technique	Affinity purification Protein A
Concentration	1.049 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/200
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information NFATC1 pS237

Function	Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2 or IL-4 gene transcription. Also controls gene expression in embryonic cardiac cells. Could regulate not only the activation and proliferation but also the differentiation and programmed death of T-lymphocytes as well as lymphoid and non-lymphoid cells (PubMed:10358178). Required for osteoclastogenesis and regulates many genes important for osteoclast differentiation and function (By similarity).

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	NFAT2 also known as NFATc1 is a transcription factor with a mass of approximately 100 kDa. It belongs to the Nuclear Factor of Activated T-cells (NFAT) family which plays significant roles in gene expression regulation. NFAT2 is expressed in T-cells B-cells and cardiac muscle tissues. It is activated through dephosphorylation by the enzyme calcineurin allowing it to translocate into the nucleus. NFAT2 binds to specific DNA motifs to regulate the transcription of target genes impacting various cellular processes.
Biological function summary	NFAT2 plays a significant role in the regulation of immune responses and cardiac hypertrophy. It functions as part of a complex with AP-1 (Activator Protein-1) during T-cell activation integrating signals necessary for cytokine production and immune cell differentiation. In cardiac cells NFAT2 influences the expression of genes involved in hypertrophic growth. NFAT2 contributes to the development and function of the immune system by modulating critical immune pathways and cellular proliferation.
Pathways	NFAT2 serves a vital function in the calcineurin-NFAT signaling pathway. This pathway is important for T-cell activation and is triggered by increased intracellular calcium levels leading to dephosphorylation of NFAT2. The dephosphorylated NFAT2 cooperates with proteins such as AP-1 to induce expression of cytokines like interleukin-2. NFAT2 is also linked with the MAPK signaling pathway which affects cellular proliferation and differentiation. Together these pathways highlight the integral role of NFAT2 in immune system function and cardiac development.
Associated diseases and disorders	NFAT2 has strong connections to autoimmune diseases and cardiac hypertrophy. Aberrations in NFAT2 activity and regulation are associated with autoimmune conditions due to its central role in immune response modulation. In cardiac hypertrophy heightened NFAT2 activity may lead to pathological enlargement of heart tissue. The protein has interactions with calcineurin which also influences these conditions. Understanding these relationships helps in exploring therapeutic targets for managing immune-related diseases and cardiac dysfunctions.

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.

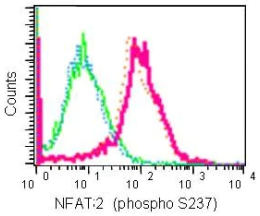
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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:
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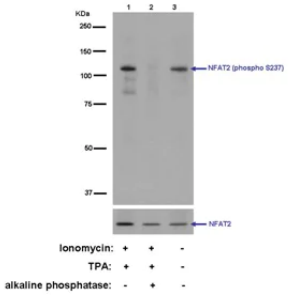
2 product images



Flow Cytometry (Intracellular) - Anti-NFAT2 (phospho S237) antibody [EPR2377(N)] (ab183023)

NFAT2 (phospho S237) Flow Cytometry (Intracellular) staining using rabbit Anti-NFAT2 (phospho S237) antibody

Intracellular Flow Cytometry analysis of permealized 293 cells labeling NFAT2 (phospho S237) using ab183023 at 1/200 dilution (red). A Goat anti rabbit IgG (FITC) at 1/150 dilution was used as secondary antibody. Cells were fixed with 2% paraformaldehyde. Isotype control: Rabbit monoclonal IgG (green).



Western blot - Anti-NFAT2 (phospho S237) antibody [EPR2377(N)] (ab183023)

All lanes:
Western blot - Anti-NFAT2 (phospho S237) antibody [EPR2377(N)] (ab183023) at 1/10000 dilution

Lane 1:
HEK-293 lysate treated with Ionomycin and TPA at 10 µg

Lane 2:
HEK-293 lysate treated with Ionomycin and TPA, then treated with alkaline phosphatase at 10 µg

Lane 3:
HEK-293 lysate untreated at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 101 kDa

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