abcam

ab240262

Anti-NFAT2 (phospho S237) antibody [EPR2377(N)] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR2377(N)
Purification technique	Affinity purification Protein A
Concentration	1.038 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.

Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - 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	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab240262 is the carrier-free version of ab183023.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

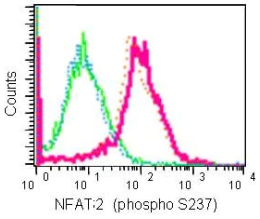
We do not recommend this combination. It is not covered by our product promise.

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:
Terms & Conditions.

1 product image



Flow Cytometry (Intracellular) - Anti-NFAT2 (phospho S237) antibody [EPR2377(N)] - BSA and Azide free (ab240262)

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).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183023).

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