

Product datasheet

Anti-NFAT4/NF-ATc3 antibody [EPR24994-68] ab283690

KO VALIDATED Recombinant RabMAB

3 Images

Overview

Product name	Anti-NFAT4/NF-ATc3 antibody [EPR24994-68]
Description	Rabbit monoclonal [EPR24994-68] to NFAT4/NF-ATc3
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt (Intra), ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, HeLa and HEK293T whole cell lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR24994-68
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab283690 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 116 kDa.

Application notes

Is unsuitable for Flow Cyt (Intra), ICC/IF, IHC-P or IP.

Target

Function

Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2.

Tissue specificity

Isoform 1 is predominantly expressed in thymus and is also found in peripheral blood leukocytes and kidney. Isoform 2 is predominantly expressed in skeletal muscle and is also found in thymus, kidney, testis, spleen, prostate, ovary, small intestine, heart, placenta and pancreas. Isoform 3 is expressed in thymus and kidney. Isoform 4 is expressed in thymus and skeletal muscle.

Sequence similarities

Contains 1 RHD (Rel-like) domain.

Domain

Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors.

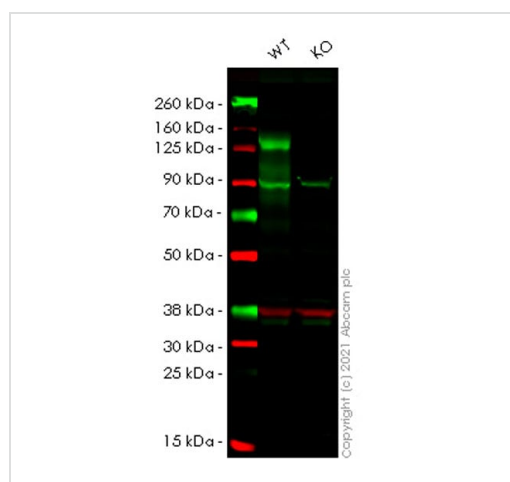
Post-translational modifications

Phosphorylated by NFATC-kinase; dephosphorylated by calcineurin.

Cellular localization

Cytoplasm. Nucleus. Cytoplasmic for the phosphorylated form and nuclear after activation that is controlled by calcineurin-mediated dephosphorylation. Rapid nuclear exit of NFATC is thought to be one mechanism by which cells distinguish between sustained and transient calcium signals. The subcellular localization of NFATC plays a key role in the regulation of gene transcription.

Images



Western blot - Anti-NFAT4/NF-ATc3 antibody [EPR24994-68] (ab283690)

All lanes : Anti-NFAT4/NF-ATc3 antibody [EPR24994-68]

(ab283690) at 1/1000 dilution

Lane 1 : Wild-type HEK293T (human embryonic kidney epithelial cell) whole cell lysate

Lane 2 : NFATC3 (NFAT4) knockout HEK293T (human embryonic kidney epithelial cell) whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (IRDye® 800CW)

(**ab216773**) and Goat Anti-Mouse IgG H&L (IRDye® 680RD)

(**ab216776**) at 1/10000 dilution

Predicted band size: 116 kDa

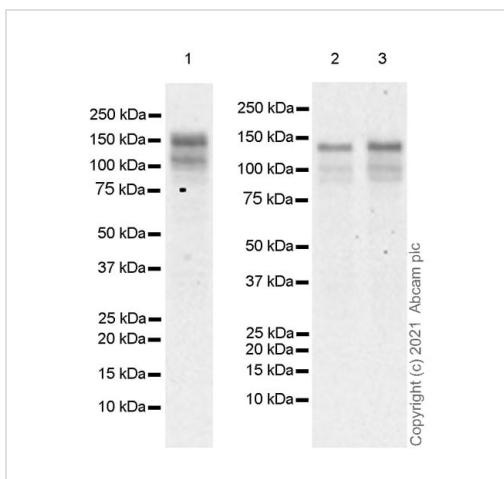
Observed band size: 140 kDa

Blocking and diluting buffer and concentration: 3% NFDM/TBST

Lanes 1- 2: Merged signal (red and green). Green - ab283690 observed at 140 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab283690 was shown to react with NFATC3 (NFAT4) in wild-type HEK293T cells in western blot. Loss of signal was observed when NFATC3 (NFAT4) knockout cell line [ab267300](#) (knockout cell lysate [ab258073](#)) was used. Wild-type HEK293T and NFATC3 (NFAT4) knockout HEK293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab283690 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at 4°C overnight at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

Lysates were made freshly and used in WB immediately to minimize protein degradation.



Western blot - Anti-NFAT4/NF-ATc3 antibody [EPR24994-68] (ab283690)

All lanes : Anti-NFAT4/NF-ATc3 antibody [EPR24994-68] (ab283690) at 1/1000 dilution

Lane 1 : Jurkat (human T cell leukemia T lymphocyte) whole cell lysate

Lane 2 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : HEK293T (human embryonic kidney epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/50000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 116 kDa

Observed band size: 140-160 kDa

Blocking and diluting buffer and concentration: 3% NFD/MTBST

The molecular weight observed is consistent with what has been described in the literature (PMID: 31988379).

Lysates were made freshly and used in WB immediately to minimize protein degradation.

Exposure time: 3 minutes

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-NFAT4/NF-ATc3 antibody [EPR24994-68]
(ab283690)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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