abcam

Product datasheet

Anti-NFAT1 antibody ab150330

1 Image

Overview

Product name	Anti-NFAT1 antibody
Description	Rabbit polyclonal to NFAT1
Host species	Rabbit
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Mouse **Predicted to work with:** Rat, Chinese hamster
Immunogen	Synthetic peptide within Mouse NFAT1 aa 50-150 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: Q60591
Positive control	This antibody gave a positive signal in BC3H1 whole cell lysate as well as the following Mouse tissue lysates: Brain; Placenta; Pancreas.

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab150330** in the following tested applications.

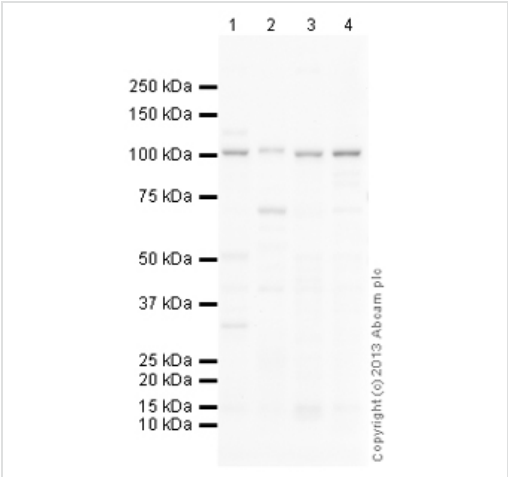
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 100 kDa).

Target

Function	Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2, IL-3, IL-4, TNF-alpha or GM-CSF.
Tissue specificity	Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas.
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	In resting cells, phosphorylated by NFATC-kinase on at least 18 sites in the 99-363 region. Upon cell stimulation, all these sites except Ser-243 are dephosphorylated by calcineurin. Dephosphorylation induces a conformational change that simultaneously exposes an NLS and masks an NES, which results in nuclear localization. Simultaneously, Ser-53 or Ser-56 is phosphorylated; which is required for full transcriptional activity.
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-NFAT1 antibody (ab150330)

All lanes : Anti-NFAT1 antibody (ab150330) at 1 µg/ml

Lane 1 : Brain (Mouse) Tissue Lysate

Lane 2 : Pancreas (Mouse) Tissue Lysate

Lane 3 : Mouse Placenta Tissue Lysate

Lane 4 : BC3H1 Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 100 kDa

Observed band size: 100 kDa
Additional bands at: 70 kDa (possible non-specific binding)

Exposure time: 4 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab150330 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

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