

## Product datasheet

# Anti-NFAT1 (phospho S54) antibody ab200819

3 References 1 Image

### Overview

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<b>Product name</b>	Anti-NFAT1 (phospho S54) antibody
<b>Description</b>	Rabbit polyclonal to NFAT1 (phospho S54)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Synthetic peptide corresponding to Mouse NFAT1 (phospho S54). Database link: <a href="#">Q60591</a>
<b>Positive control</b>	Murine T-cells + PMA + Ionomycin.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&amp;As.</p>

### Properties

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<b>Form</b>	Liquid
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<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA  PBS without Mg <sup>2+</sup> and Ca <sup>2+</sup>
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab200819 was negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated NFAT1. The final product is generated by affinity chromatography using a NFAT1-derived peptide phosphorylated at serine 54.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab200819** in the following tested applications.

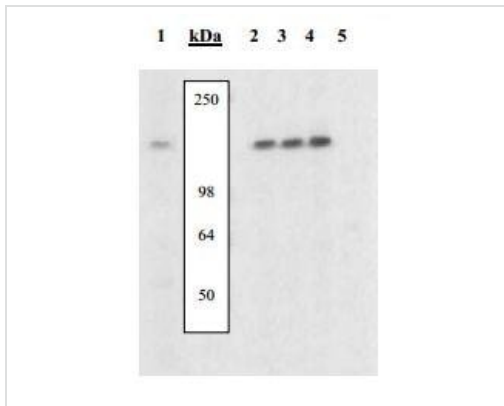
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 100 kDa.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas.
<b>Sequence similarities</b>	Contains 1 RHD (Rel-like) domain.
<b>Domain</b>	Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	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 (phospho S54) antibody (ab200819)

**All lanes :** Anti-NFAT1 (phospho S54) antibody (ab200819) at 1/1000 dilution

**Lane 1 :** Extracts of Murine T cells were left untreated with no peptide

**Lane 2 :** Extracts of Murine T cells were treated with PMA and Ca<sup>2+</sup> ionophore ionomycin with no peptide

**Lane 3 :** Extracts of Murine T cells were treated with PMA and Ca<sup>2+</sup> ionophore ionomycin with the non-phosphopeptide corresponding to the phosphopeptide immunogen

**Lane 4 :** Extracts of Murine T cells were treated with PMA and Ca<sup>2+</sup> ionophore ionomycin with a generic phosphoserine-containing peptide

**Lane 5 :** Extracts of Murine T cells were treated with PMA and Ca<sup>2+</sup> ionophore ionomycin with the phosphopeptide immunogen

#### Secondary

**All lanes :** Goat F(ab')<sub>2</sub> anti-rabbit IgG alkaline phosphatase

**Predicted band size:** 100 kDa

Resolved by SDS-PAGE on a 10% Tris-glycine gel

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

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