

**Product Name: NFATc4 (phospho Ser168/S170) Rabbit Polyclonal Antibody**  
**Catalog #: APRab05087**

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## Summary

<b>Production Name</b>	NFATc4 (phospho Ser168/S170) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	NFATC4
<b>Alternative Names</b>	NFATC4; NFAT3; Nuclear factor of activated T-cells; cytoplasmic 4; NF-ATc4; NFATc4; T-cell transcription factor NFAT3; NF-AT3
<b>Gene ID</b>	4776.0
<b>SwissProt ID</b>	Q14934.The antiserum was produced against synthesized peptide derived from human NFAT3 around the phosphorylation site of Ser168 and Ser170. AA range:136-185

## Application

<b>Dilution Ratio</b>	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:5000, IF-P/IF-F/ICC/IF 1:50-200
<b>Molecular Weight</b>	140kDa

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## Background

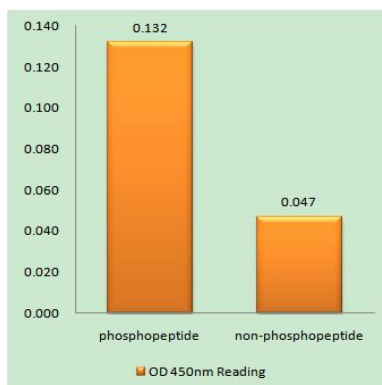
This gene encodes a member of the nuclear factor of activated T cells (NFAT) protein family. The encoded protein is part of a DNA-binding transcription complex. This complex consists of at least two components: a preexisting cytosolic component that translocates to the nucleus upon T cell receptor stimulation and an inducible nuclear component. NFAT proteins are activated by the calmodulin-dependent phosphatase, calcineurin. The encoded protein plays a role in the inducible expression of cytokine genes in T cells, especially in the induction of interleukin-2 and interleukin-4. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014], domain:Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors., function:Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2 and IL-4. Transcriptionally repressed by estrogen receptors; this inhibition is further enhanced by estrogen. Increases the transcriptional activity of PPARG and has a direct role in adipocyte differentiation. May play an important role in myotube differentiation. May play a critical role in cardiac development and hypertrophy. May play a role in deafferentation-induced apoptosis of sensory neurons., PTM:Phosphorylated by NFATC-kinases; dephosphorylated by calcineurin. Phosphorylated on Ser-168 and Ser-170 by FRAP1, IRAK1, MAPK7 and MAPK14, on Ser-213 and Ser-217 by MAPK8 and MAPK9, and on Ser-289 and Ser-344 by RPS6KA3. Phosphorylated by GSK3B., PTM:Ubiquitinated, leading to its degradation by the proteasome and reduced transcriptional activity. Ubiquitination and reduction in transcriptional activity can be further facilitated through GSK3B-dependent phosphorylation. Polyubiquitin linkage is mainly through 'Lys-48'. , similarity:Contains 1 IPT/TIG domain., similarity:Contains 1 RHD (Rel-like) domain., subcellular location: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., subunit:Member of the multicomponent NFATC transcription complex that consists of at least two components, a pre-existing cytoplasmic component NFATC2 and an inducible nuclear component NFATC1. Other members such as NFATC4, NFATC3 or members of the activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind the complex. NFATC proteins bind to DNA as monomers. Interacts with CREBBP, GATA4, IRAK1, MAPK8, MAPK9 and RPS6KA3., tissue specificity:Highly expressed in placenta, lung, kidney, testis and ovary. Weakly expressed in spleen and thymus. Not expressed in peripheral blood lymphocytes. Detected in hippocampus.,

## Research Area

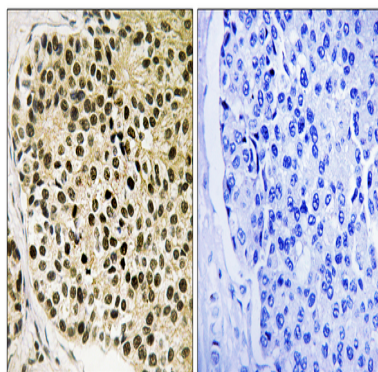
MAPK\_ERK\_Growth; MAPK\_G\_Protein; WNT; WNT-T CELL Axon guidance; VEGF; Natural killer cell mediated cytotoxicity; T\_Cell\_Receptor; B\_Cell\_Antigen;

## Image Data

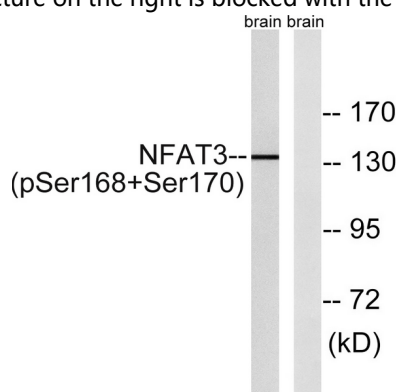
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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NFAT3 (Phospho-Ser168+Ser170) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using NFAT3 (Phospho-Ser168+Ser170) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of NFAT3 (Phospho-Ser168+Ser170) Antibody. The lane on the right is blocked with the NFAT3 (Phospho-Ser168+Ser170) peptide.

## Note

For research use only.