



Rabbit Anti-NFATC4 antibody

SL6461R

Product Name:	NFATC4
Chinese Name:	T细胞激活核转录因子4抗体
Alias:	NF-ATc4; NFATC4 cytoplasmic 4; NF ATc4; NF-AT3; NF-ATc4; NFAC4_HUMAN; NFAT3; NFATc4; Nuclear factor of activated T cells cytoplasmic 4; Nuclear factor of activated T cells cytoplasmic calcineurin dependent 4; Nuclear factor of activated T-cells; nuclear factor of activated T-cells cytoplasmic 4; Nuclear factor of activated T-cells cytoplasmic calcineurin-dependent 4; T cell transcription factor NFAT3; T-cell transcription factor NFAT3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	95kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NF-ATc4:475-525/902
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The product of this gene is a member of the nuclearfactors of activated T cells 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 (TCR) stimulation and an inducible nuclear component. Other members of this family of nuclear factors of activated T cells also participate in the formation of this complex. The product of this gene plays a role in the inducible expression of cytokine genes in T cells, especially in the induction of the IL-2 and IL-4. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

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 PPAR γ 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.

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.

Subcellular Location:

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.

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.

Post-translational modifications:

Phosphorylated by NFATC-kinases; dephosphorylated by calcineurin. Phosphorylated on Ser-168 and Ser-170 by MTOR, 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.

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.
Contains 1 RHD (Rel-like) domain.

SWISS:
Q14934

Gene ID:
4776

Database links:

[Entrez Gene: 4776](#) Human

[Entrez Gene: 73181](#) Mouse

[Entrez Gene: 305897](#) Rat

[Omim: 602699](#) Human

[SwissProt: Q14934](#) Human

[SwissProt: Q8K120](#) Mouse

[Unigene: 77810](#) Human

[Unigene: 27908](#) Mouse

[Unigene: 23727](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.