



## Rabbit Anti-NFAT1 antibody

SL4246R

<b>Product Name:</b>	NFAT1
<b>Chinese Name:</b>	核因子活化T细胞胞浆蛋白2抗体
<b>Alias:</b>	NFATc2; AI607462; KIAA0611; NF ATp; NF-ATc2; NFAT 1; NFAT pre existing subunit; NFAT transcription complex, preexisting component; NFAT1; NFAT1-D; NFATc2; NFATp; Nuclear factor of activated T cells cytoplasmic 2; Nuclear factor of activated T cells cytoplasmic calcineurin dependent 2; Nuclear factor of activated T cells pre-existing component; T cell transcription factor NFAT; NF2IP_HUMAN; Nuclear factor of activated T-cells, cytoplasmic 2; NFAT pre-existing subunit; NF-ATp; T-cell transcription factor NFAT1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	100kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human NFATc2:451-550/925
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	This gene is a member of the nuclear factor of activated T cells (NFAT) family. The

product of this gene is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell receptor (TCR) stimulation, where it becomes a member of the nuclear factors of activated T cells transcription complex. This complex plays a central role in inducing gene transcription during the immune response. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Apr 2012]

**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. Promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway.

**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. The phosphorylated form specifically interacts with XPO1; which mediates nuclear export. NFATC proteins bind to DNA as monomers. Interacts with NFATC2IP (By similarity).

**Subcellular Location:**

Cytoplasm. Nucleus. Note=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:**

Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas.

**Post-translational modifications:**

In resting cells, phosphorylated by NFATC-kinase on at least 18 sites in the 99-365 region. Upon cell stimulation, all these sites except Ser-245 are dephosphorylated by calcineurin. Dephosphorylation induces a conformational change that simultaneously exposes an NLS and masks an NES, which results in nuclear localization. Simultaneously, one site among Ser-53; Ser-54 and Ser-56 is phosphorylated; which is required for full transcriptional activity.

**Similarity:**

Contains 1 RHD (Rel-like) domain.

**SWISS:**

Q13469

**Gene ID:**  
4773

**Database links:**

[Entrez Gene: 4773](#) Human

[Entrez Gene: 18019](#) Mouse

[Entrez Gene: 311658](#) Rat

[Omim: 600490](#) Human

[SwissProt: Q13469](#) Human

[SwissProt: Q60591](#) Mouse

[Unigene: 713650](#) Human

[Unigene: 744148](#) Human

[Unigene: 116802](#) Mouse

[Unigene: 33679](#) Rat

**Important Note:**

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