

# Rabbit Anti-phospho-NFAT4 (Ser165) antibody

# SL19787R

Product Name:	phospho-NFAT4 (Ser165)
Chinese Name:	磷酸化T细胞转录因子NFAT4抗体
Alias:	NFAT4 (phospho S165); p-NFAT4 (phospho S165); C80703; cytoplasmic 3; D8Ertd281e; NF AT4; NF ATc3; NF-AT4; NF-ATc3; NFAC3_HUMAN; NFATc3; NFATx; Nuclear factor of activated T cells, cytoplasmic 3; nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 3; Nuclear factor of activated T-cells; T cell transcription factor NFAT4; T-cell transcription factor NFAT4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Chicken, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	116kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human NFAT4 around the phosphorylation site of Ser165:SP(p-S)PA
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:	<u>PubMed</u>
Product Detail:	The product of this gene is a member of the nuclear factors 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 participate to form this complex also. The product of this gene plays a role in the regulation of gene expression in T cells and immature thymocytes. Several transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Nov 2010]

#### **Function:**

Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2.

#### **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:

Isoform 1 is predominantly expressed in thymus and is also found in peripheral blood leukocytes and kidney. Isoform 2 is predominantly expressed in skeletal muscle and is also found in thymus, kidney, testis, spleen, prostate, ovary, small intestine, heart, placenta and pancreas. Isoform 3 is expressed in thymus and kidney. Isoform 4 is expressed in thymus and skeletal muscle.

## Post-translational modifications:

Phosphorylated by NFATC-kinase; dephosphorylated by calcineurin.

#### Similarity:

Contains 1 RHD (Rel-like) domain.

# **SWISS:**

O12968

#### Gene ID:

4775

#### Database links:

Entrez Gene: 4775 Human

Entrez Gene: 18021 Mouse

Entrez Gene: 361400 Rat

Omim: 602698 Human

SwissProt: Q12968 Human

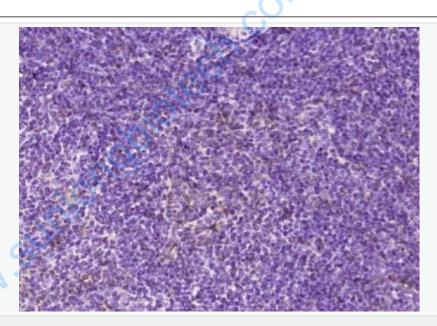
SwissProt: P97305 Mouse

Unigene: 436585 Human

Unigene: 383185 Mouse

# **Important Note:**

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



## Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-NFAT4 (Ser165)) Polyclonal Antibody, Unconjugated (SL19787R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.