

**NFATc2 Polyclonal Antibody**

<b>Catalog No :</b>	YT6023
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	NFAT1
<b>Fields :</b>	>>cGMP-PKG signaling pathway;>>Cellular senescence;>>Wnt signaling pathway;>>Axon guidance;>>VEGF signaling pathway;>>Osteoclast differentiation;>>C-type lectin receptor signaling pathway;>>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>B cell receptor signaling pathway;>>Oxytocin signaling pathway;>>Yersinia infection;>>Hepatitis B;>>Human cytomegalovirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Human immunodeficiency virus 1 infection;>>PD-L1 expression and PD-1 checkpoint pathway in cancer;>>Lipid and atherosclerosis
<b>Gene Name :</b>	NFATC2 NFAT1 NFATP
<b>Protein Name :</b>	Nuclear factor of activated T-cells, cytoplasmic 2 (NF-ATc2) (NFATc2) (NFAT pre-existing subunit) (NF-ATp) (T-cell transcription factor NFAT1)
<b>Human Gene Id :</b>	4773
<b>Human Swiss Prot No :</b>	Q13469
<b>Mouse Gene Id :</b>	18019
<b>Mouse Swiss Prot No :</b>	Q60591
<b>Immunogen :</b>	Synthetic peptide from human protein at AA range: 640-700
<b>Specificity :</b>	The antibody detects endogenous NFATc2
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500-2000 IHC 1:50-200, ELISA 1:10000-20000. IF 1:50-200

**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 100kD

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

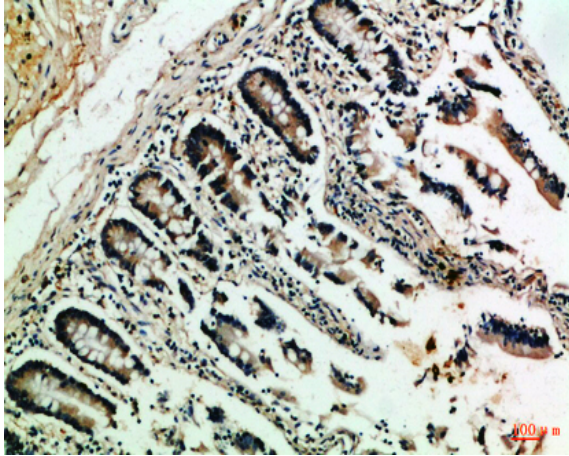
**Background :** This gene is a member of the nuclear factor of activated T cells (NFAT) family. The product of this gene is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell 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 :** alternative products:Additional isoforms seem to exist,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, IL-3, IL-4, TNF-alpha or GM-CSF.,induction:Inducibly expressed in T-lymphocytes upon activation of the T-cell receptor (TCR) complex. Induced after co-addition of phorbol 12-myristate 13-acetate (PMA) and ionomycin.,PTM: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

**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.

**Expression :** Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. Isoform 1 is highly expressed in the small intestine, heart, testis, prostate, thymus, placenta and thyroid. Isoform 3 is highly expressed in stomach,

## Products Images



Immunohistochemical analysis of paraffin-embedded Human-colon, antibody was diluted at 1:100