

**NFATc4 (phospho Ser676) Polyclonal Antibody**

<b>Catalog No :</b>	YP0313
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	NFAT3
<b>Fields :</b>	>>cGMP-PKG signaling pathway;>>Cellular senescence;>>Wnt signaling pathway;>>Axon guidance;>>C-type lectin receptor signaling pathway;>>Oxytocin signaling pathway;>>Hepatitis B;>>Human cytomegalovirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Human immunodeficiency virus 1 infection
<b>Gene Name :</b>	NFATC4
<b>Protein Name :</b>	Nuclear factor of activated T-cells cytoplasmic 4
<b>Human Gene Id :</b>	4776
<b>Human Swiss Prot No :</b>	Q14934
<b>Mouse Gene Id :</b>	73181
<b>Mouse Swiss Prot No :</b>	Q8K120
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human NFAT3 around the phosphorylation site of Ser676. AA range:642-691
<b>Specificity :</b>	Phospho-NFATc4 (S676) Polyclonal Antibody detects endogenous levels of NFATc4 protein only when phosphorylated at S676.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	120kD
<b>Cell Pathway :</b>	MAPK_ERK_Growth;MAPK_G_Protein;WNT;WNT-T CELL Axon guidance;VEGF;Natural killer cell mediated cytotoxicity;T_Cell_Receptor;B_Cell_Antigen;
<b>Background :</b>	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],
<b>Function :</b>	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
<b>Subcellular Location :</b>	Cytoplasm, cytosol . Nucleus . When hyperphosphorylated, localizes in the cytosol. When intracellular Ca(2+) levels increase, dephosphorylation by calcineurin/PPP3CA leads to translocation into the nucleus (PubMed:11997522, PubMed:18347059). MAPK7/ERK5 and MTOR regulate NFATC4 nuclear export through phosphorylation at Ser-168 and Ser-170 (PubMed:18347059) .
<b>Expression :</b>	Widely expressed, with high levels in placenta, lung, kidney, testis and ovary (PubMed:18675896). Weakly expressed in spleen and thymus (PubMed:18675896). In the hippocampus, expressed in the granular layer of the dentate gyrus, in the pyramidal neurons of CA3 region, and in the hippocampal

fissure (PubMed:18675896). Expressed in the heart (at protein level)  
(PubMed:12370307).

**Tag :** orthogonal

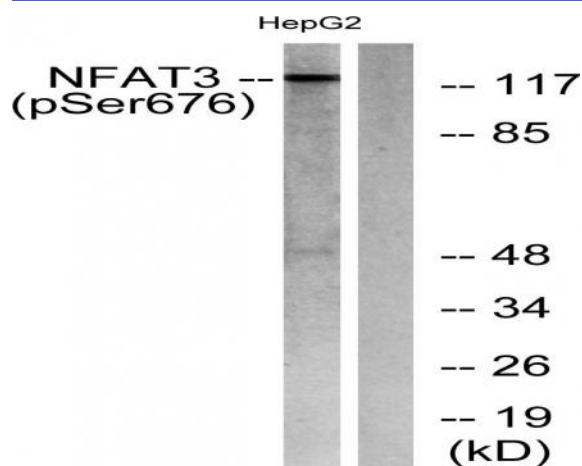
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**No4 :** 1

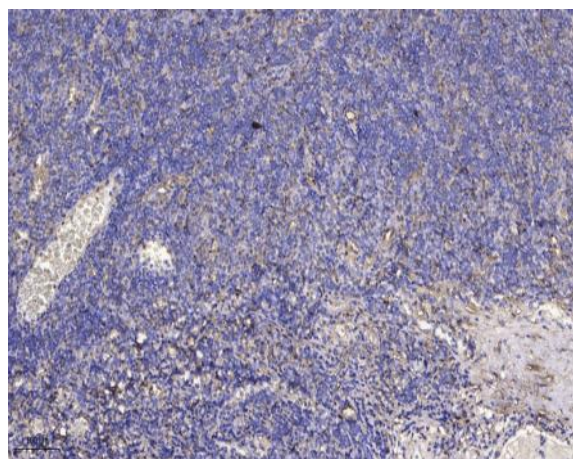
**Host :** Rabbit

**Modifications :** Phospho

## Products Images



Western blot analysis of lysates from HepG2 cells treated with  $\text{Ca}^{2+}$  40uM 30', using NFAT3 (Phospho-Ser676) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).