

NFATc4 Polyclonal Antibody

Catalog No: YT3085

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: NFAT3

Fields: >>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 sarcomaassociated herpesvirus infection;>>Human immunodeficiency virus 1 infection

Gene Name: NFATC4

Protein Name: Nuclear factor of activated T-cells cytoplasmic 4

Q14934

Q8K120

Human Gene Id: 4776

Human Swiss Prot

No:

Mouse Gene ld: 73181

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

NFAT3. AA range:642-691

Specificity: NFATc4 Polyclonal Antibody detects endogenous levels of NFATc4 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.



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: 135kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;WNT;WNT-T CELLAxon

guidance; VEGF; Natural killer cell mediated cytotoxicity; T Cell Receptor; B Cell Antigen;

Background: 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],

Function: 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

Subcellular Location:

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). .

Expression: 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).

orthogonal Tag:

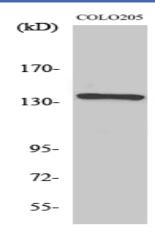
Sort: 1101

No4:

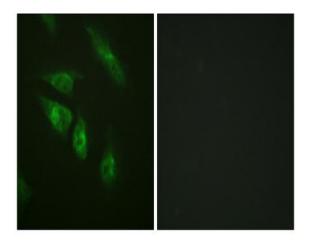
Host: Rabbit

Unmodified **Modifications:**

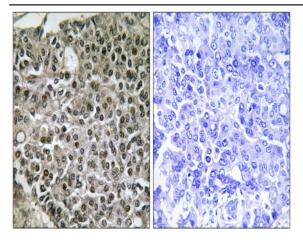
Products Images



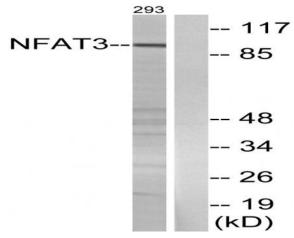
Western Blot analysis of various cells using NFATc4 Polyclonal Antibody diluted at 1:500



Immunofluorescence analysis of HeLa cells, using NFAT3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using NFAT3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using NFAT3 Antibody. The lane on the right is blocked with the synthesized peptide.