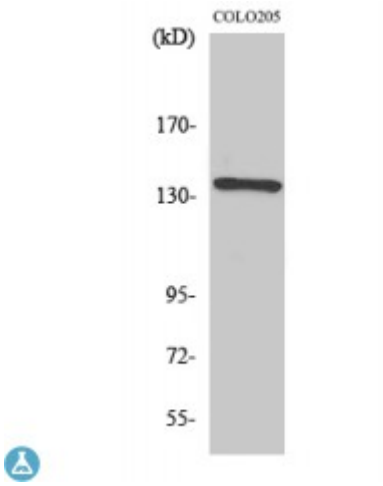
Anti-NFATc4 antibody



Description	Rabbit polyclonal to NFATc4.

Model	STJ94450
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human NFATc4 around the non-phosphorylation site of S676.
Immunogen Region	620-700 aa
Gene ID	4776
Gene Symbol	NFATC4
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	NFATc4 Polyclonal Antibody detects endogenous levels of NFATc4 protein.
Tissue Specificity	Highly expressed in placenta, lung, kidney, testis and ovary. Weakly expressed in spleen and thymus. Not expressed in peripheral blood lymphocytes. Detected in hippocampus.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Nuclear factor of activated T-cells, cytoplasmic 4 NF-ATc4 NFATc4 T-cell transcription factor NFAT3 NF-AT3

Molecular Weight	95 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7778OMIM:602699
Alternative Names	Nuclear factor of activated T-cells, cytoplasmic 4 NF-ATc4 NFATc4 T-cell transcription factor NFAT3 NF-AT3
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.
Sequence and Domain Family	Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors.
Cellular Localization	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.
Post-translational Modifications	Phosphorylated by NFATC-kinases; dephosphorylated by calcineurin. Phosphorylated on Ser-168 and Ser-170 by MTOR, 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. Ubiquitinated, leading to its degradation by the proteasome and reduced transcriptional activity. Ubiquitination and reduction in transcriptional activity can be further facilitated through GSK3B-dependent phosphorylation. Polyubiquitin linkage is mainly through 'Lys-48'.