

Phospho-NFAT2 (Ser237) Rabbit mAb

Catalog # AP75804

Product Information

Application WB Primary Accession 095644

Reactivity Human, Mouse

Host Rabbi

Clonality Monoclonal Antibody

Calculated MW 101243

Additional Information

Gene ID 4772

Other Names NFATC1

Dilution WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name NFATC1

Synonyms NFAT2, NFATC

Function Plays a role in the inducible expression of cytokine genes in T-cells,

especially in the induction of the IL-2 or IL-4 gene transcription. Also controls gene expression in embryonic cardiac cells. Could regulate not only the activation and proliferation but also the differentiation and programmed death of T-lymphocytes as well as lymphoid and non-lymphoid cells (PubMed:10358178). Required for osteoclastogenesis and regulates many genes important for osteoclast differentiation and function (By similarity).

Cellular Location Cytoplasm. Nucleus. Note=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. Translocation to the nucleus is increased in the presence of calcium in pre-osteoblasts (By similarity). The subcellular localization of

NFATC plays a key role in the regulation of gene transcription

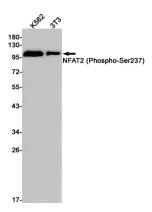
(PubMed:16511445). Nuclear translocation of NFATC1 is enhanced in the

presence of TNFSF11. Nuclear translocation is decreased in the presence of FBN1 which can bind and sequester TNFSF11 (By similarity). {ECO:0000250|UniProtKB:O88942, ECO:0000269|PubMed:16511445}

Tissue Location

Expressed in thymus, peripheral leukocytes as T- cells and spleen. Isoforms A are preferentially expressed in effector T-cells (thymus and peripheral leukocytes) whereas isoforms B and isoforms C are preferentially expressed in naive T-cells (spleen) Isoforms B are expressed in naive T-cells after first antigen exposure and isoforms A are expressed in effector T-cells after second antigen exposure. Isoforms IA are widely expressed but not detected in liver nor pancreas, neural expression is strongest in corpus callosum Isoforms IB are expressed mostly in muscle, cerebellum, placenta and thymus, neural expression in fetal and adult brain, strongest in corpus callosum.

Images



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