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NFAT2 Antibody

Rabbit mAb
Catalog # AP91285

Product Information

Application	WB, IF, FC, ICC
Primary Accession	O95644
Reactivity	Human
Clonality	Monoclonal
Other Names	cytoplasmic 1; NF ATc; NF ATc1; NF-ATc; NF-ATc1; NFAC1; NFAT 2; NFAT2; NFATC 1; NFATc; NFATc1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	101243

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human NFAT2
Description	NFAT proteins are predominantly expressed in cells of the immune system, but are also expressed in skeletal muscle, keratinocytes, and adipocytes, regulating cell differentiation programs in these cells.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

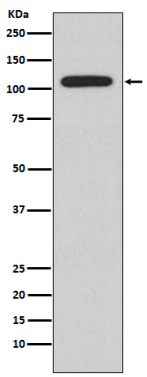
Name	NFATC1
Synonyms	NFAT2, NFATC
Function	Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2 or IL-4 gene transcription. Also controls gene expression in embryonic cardiac cells. Could regulate not only the activation and proliferation but 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



Western blot analysis of NFAT2 expression in Ramos cell lysate.