

# Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody

Catalog # ABO13793

# Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody - Product Information

Application WB, IF, ICC, FC **Primary Accession** 095644 Rabbit Host Isotype Rabbit IgG Reactivity Human Clonality Monoclonal Format Liquid Description Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

# Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4772

**Other Names** Nuclear factor of activated T-cells, cytoplasmic 1, NF-ATc1, NFATc1, NFAT transcription complex cytosolic component, NF-ATc, NFATc, NFATC1, NFAT2, NFATC

Calculated MW 101243 MW KDa

Application Details WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>FC 1:50

Subcellular 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.

### **Tissue Specificity**

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.

### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.



### Immunogen A synthesized peptide derived from human NFAT2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

### Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/10358178" target="\_blank">10358178</a>). 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:088942, 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.

### Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-NFAT2 NFATC1 Rabbit Monoclonal Antibody - Images



Western blot analysis of NFAT2 expression in Ramos cell lysate.