

**NFATc1 Polyclonal Antibody**  
**Catalog # AP73564****Specification**

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**NFATc1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O95644</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

**NFATc1 Polyclonal Antibody - Additional Information****Gene ID** 4772**Other Names**

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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**NFATc1 Polyclonal 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:O88942, ECO:0000269|PubMed:16511445}

#### Tissue Location

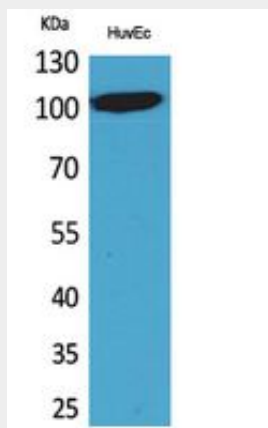
Expressed in thymus, peripheral leukocytes as T- cells and spleen. Isoforms A are preferentially expressed in effector T-cells (thymus and peripheral leukocytes) whereas isoforms B and isoforms C are preferentially expressed in naive T-cells (spleen) Isoforms B are expressed in naive T-cells after first 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.

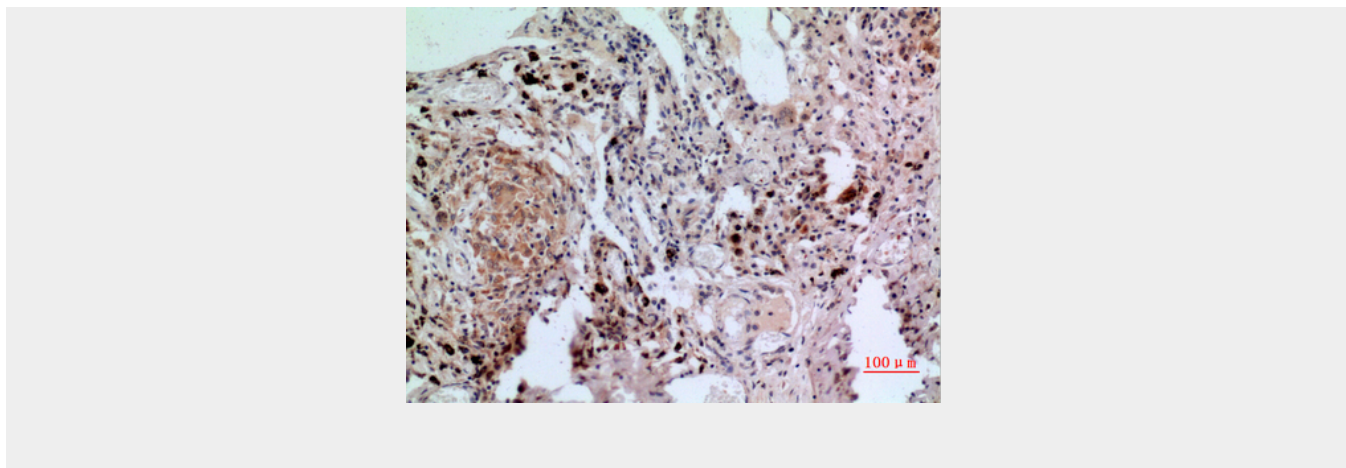
#### NFATc1 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### NFATc1 Polyclonal Antibody - Images





### **NFATc1 Polyclonal Antibody - Background**

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).

### **NFATc1 Polyclonal Antibody - Citations**

- [Nitrogen-Doped Multiwalled Carbon Nanotubes Enhance Bone Remodeling through Immunomodulatory Functions](#)