

# NFATc1 Polyclonal Antibody

Catalog # AP73564

# **Product Information**

Application	WB, IHC-P
Primary Accession	<u>095644</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101243

### **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

## **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: <u>10358178</u> ). 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.

# 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).

### Images



Western Blot analysis of HuvEc cells using NFATc1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.