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NFATC1 Antibody (aa428-716, clone AT1C3)

Mouse Monoclonal Antibody
Catalog # ALS12636

Specification

NFATC1 Antibody (aa428-716, clone AT1C3) - Product Information

Application	**IHC**
Primary Accession	O95644
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**101kDa KDa**

NFATC1 Antibody (aa428-716, clone AT1C3) - 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

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
NFATC1 Antibody (aa428-716, clone AT1C3) is for research use only and not for use in diagnostic or therapeutic procedures.

NFATC1 Antibody (aa428-716, clone AT1C3) - 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.

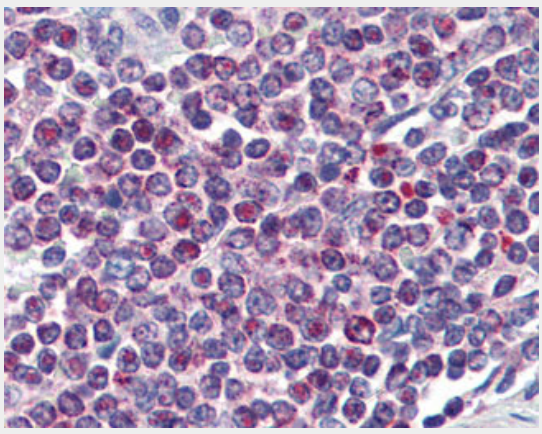
Volume
50 µl

NFATC1 Antibody (aa428-716, clone AT1C3) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NFATC1 Antibody (aa428-716, clone AT1C3) - Images



Anti-NFATC1 antibody IHC of human spleen.

NFATC1 Antibody (aa428-716, clone AT1C3) - Background

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of T-lymphocytes as well as lymphoid and non-lymphoid cells.

NFATC1 Antibody (aa428-716, clone AT1C3) - References

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