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NFATC2 / NFAT1 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF2986a

Specification

NFATC2 / NFAT1 Antibody (internal region) - Product Information

Application	**WB, IHC, E**
Primary Accession	Q13469
Other Accession	NP_036472.2, NP_775114.1, NP_001129493.1, 4773, 140488 (mouse), 312320 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**100146**

NFATC2 / NFAT1 Antibody (internal region) - Additional Information

Gene ID 4773

Other Names
Nuclear factor of activated T-cells, cytoplasmic 2, NF-ATc2, NFATc2, NFAT pre-existing subunit, NF-ATp, T-cell transcription factor NFAT1, NFATC2, NFAT1, NFATP

Dilution
WB~~1:1000
IHC~~1:100~500
E~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NFATC2 / NFAT1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

NFATC2 / NFAT1 Antibody (internal region) - Protein Information

Name NFATC2

Synonyms NFAT1, NFATP

Function
Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2, IL-3, IL-4, TNF-alpha or GM-CSF (PubMed:15790681). Promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway (PubMed:21871017). Is involved in the negative regulation of chondrogenesis (PubMed:35789258). Recruited by AKAP5 to ORAI1 pore- forming subunit of CRAC channels in Ca(2+) signaling microdomains where store-operated Ca(2+) influx is coupled to calmodulin and calcineurin signaling and activation of NFAT-dependent transcriptional responses.

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. The subcellular localization of NFATC plays a key role in the regulation of gene transcription

Tissue Location
Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. Isoform 1 is highly expressed in the small intestine, heart, testis, prostate, thymus, placenta and thyroid Isoform 3 is highly expressed in stomach, uterus, placenta, trachea and thyroid.

NFATC2 / NFAT1 Antibody (internal region) - 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

NFATC2 / NFAT1 Antibody (internal region) - Images

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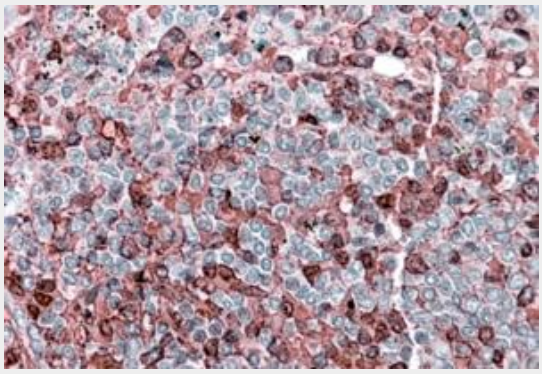
AF2986a (0.3 µg/ml) staining of MOLT4 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2986a (3.8 µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

NFATC2 / NFAT1 Antibody (internal region) - Background

This antibody is expected to recognize all three reported isoforms (NP_036472.2; NP_775114.1; NP_001129493.1).

NFATC2 / NFAT1 Antibody (internal region) - References

Nuclear factor of activated T cell mediates proinflammatory gene expression in response to mechanotransduction. Celil Aydemir AB, Lee S, Won Kim D, Gardner TR, Prince D, Mok Ahn J, Young-In Lee F, Ann. N. Y. Acad. Sci. 2007 Nov 1117 : 138-42. PMID: 17584983