

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

DilutionWB~~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

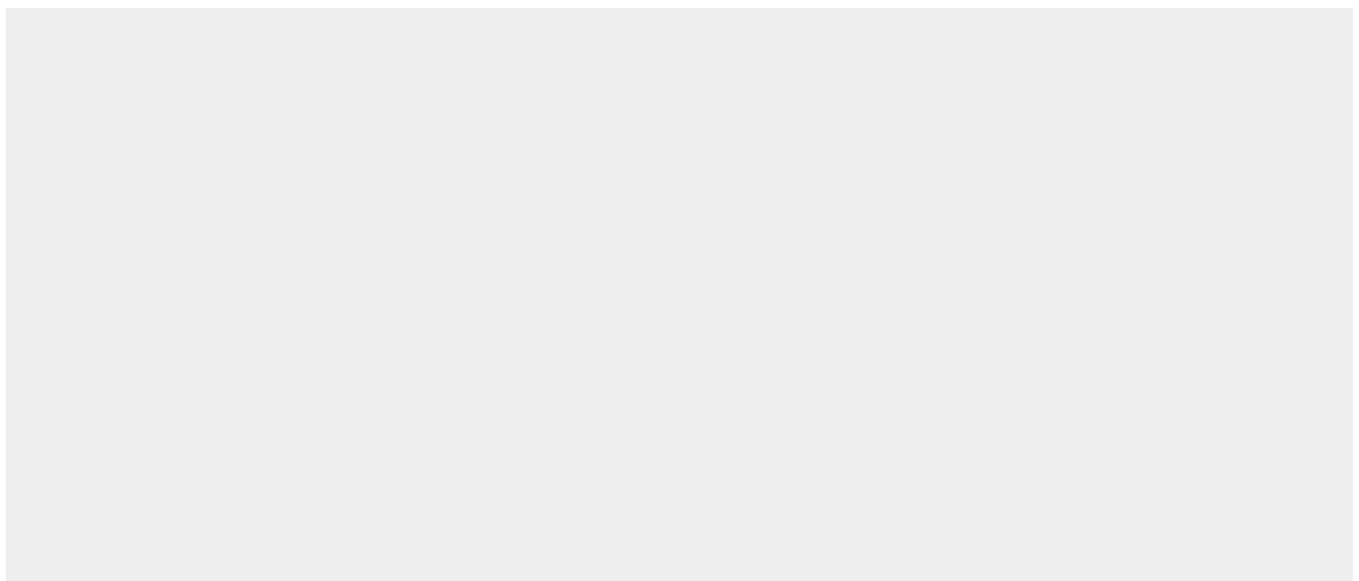
Tissue Location

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

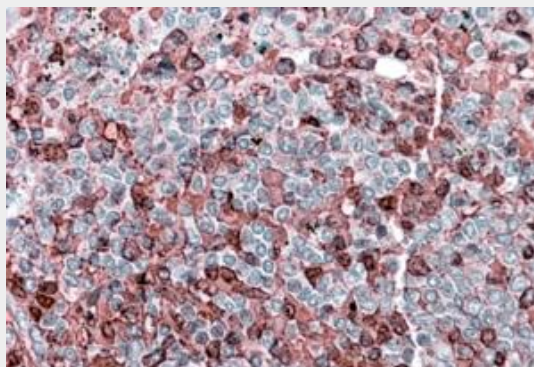
Provided below are standard protocols that you may find useful for product applications.

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

NFATC2 / NFAT1 Antibody (internal region) - Images



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