

Phospho-NFATC2(S330) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP3429a

Product Information

Application	WB, DB, E
Primary Accession	Q13469
Other Accession	NP_036472
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB12881
Calculated MW	100146

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
Target/Specificity	This NFATC2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S330 of human NFATC2.
Dilution	WB~~1:1000 DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-NFATC2(S330) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

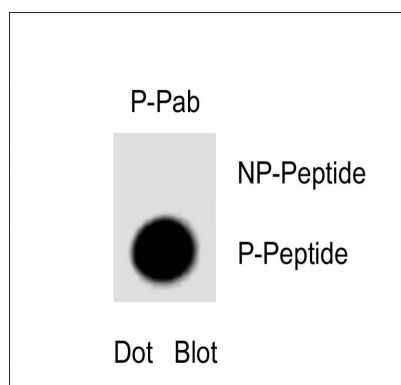
Background

NFATC2 is a member of the nuclear factor of activated T cells (NFAT) family. It is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell receptor (TCR) stimulation, where it becomes a member of the nuclear factors of activated T cells transcription complex. This complex plays a central role in inducing gene transcription during the immune response.

References

Golks,A., EMBO J. 26 (20), 4368-4379 (2007)
Dong,X., J. Biol. Chem. 282 (41), 30303-30310 (2007)
Gibson,H.M., J. Immunol. 179 (6), 3831-3840 (2007)

Images



Dot blot analysis of Phospho-NFATC2(S330) Antibody (Cat. AP3429a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibodies working concentration was 0. 5ug per ml.

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