10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-NFATC2(S330) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3429a

Specification

Phospho-NFATC2(S330) Antibody - Product Information

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

Phospho-NFATC2(S330) Antibody - 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 0.09% (W/V) sodium azide. 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.

Phospho-NFATC2(S330) Antibody - 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

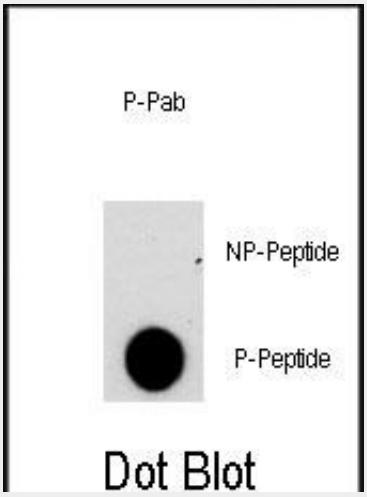
Tissue Location
Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. Isoform 1 is highly expressed in the small intestine, heart, testis, prostate, thymus, placenta and thyroid Isoform 3 is highly expressed in stomach, uterus, placenta, trachea and thyroid.

Phospho-NFATC2(S330) Antibody - 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

Phospho-NFATC2(S330) Antibody - Images



Dot blot analysis of anti-NFATC2-pS330 Phospho-specific Pab (Cat.#AP3429a) on nitrocellulose

membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-NFATC2(S330) Antibody - 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.

Phospho-NFATC2(S330) Antibody - 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)