

Phospho-NFATC2(S330) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3429a

Specification

Phospho-NFATC2(S330) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW DB,E <u>O13469</u> <u>NP_036472</u> Human Rabbit Polyclonal Rabbit IgG 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 DB~~1:500

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:<u>15790681</u>). Promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway (PubMed:<u>21871017</u>). Is involved in the negative regulation of chondrogenesis (PubMed:<u>35789258</u>).

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

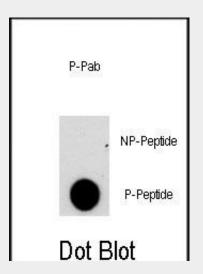
Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. Isoform 1 is highly expressed in the small intestine, heart, testis, prostate, thymus, placenta and thyroid Isoform 3 is highly expressed in stomach, uterus, placenta, trachea and thyroid.

Phospho-NFATC2(S330) Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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)