

Phospho-NFATC2(S330) Antibody Blocking peptide Synthetic peptide Catalog # BP3429a

Specification

Phospho-NFATC2(S330) Antibody Blocking peptide - Product Information

Primary Accession Other Accession

<u>Q13469</u> <u>NP_036472</u>

Phospho-NFATC2(S330) Antibody Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP3429a was selected from the region of human Phospho-NFATC2-pS330. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-NFATC2(S330) Antibody Blocking peptide - 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).



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 Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

Phospho-NFATC2(S330) Antibody Blocking peptide - Images

Phospho-NFATC2(S330) Antibody Blocking peptide - 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 Blocking peptide - 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)