For Research Use Only

NFATC2 Monoclonal antibody

Catalog Number:66917-1-Ig

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Basic Information

Catalog Number:
66917-1-Ig

Size:
2000 μg/ml

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG17990

GenBank Accession Number:
BC136418

GeneID (NCBI):
4773

UNIPROT ID:
Q13469

Full Name:
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2

Calculated MW:
925 aa, 100 kDa

Observed MW:
135-140 kDa

Purification Method:
Protein G purification

CloneNo.:
1F3B2

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, FC (Intra), ELISA

Species Specificity:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : Ramos cells, Daudi cells, Jurkat cells

IHC : human breast cancer tissue, human lymphoma tissue, mouse testis tissue

Background Information

Nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), also named NFAT1, or NFATP, is a 925 amino acid protein, which is expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. 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. NFATC2 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. NFATC2 promotes invasive migration through the activation of GPC6 expression and WNT5A signaling pathway. The calculated molecular weight of NFATC2 is about 97-100 kDa, but the modified NFATC2 protein is about 135 kDa.

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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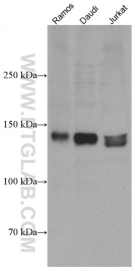
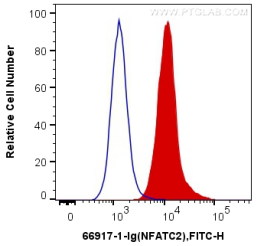
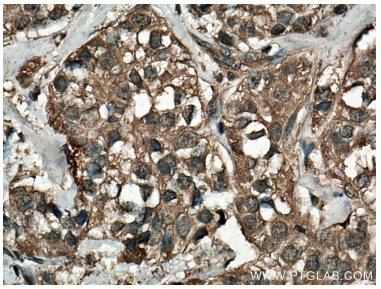
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66917-1-Ig (NFATC2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



1X10^6 Jurkat cells were intracellularly stained with 0.2 ug Anti-Human NFATC2 (66917-1-Ig, Clone:1F3B2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66917-1-Ig (NFATC2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).