

For Research Use Only

NFATC2 Polyclonal antibody

Catalog Number: 22023-1-AP

Featured Product

17 Publications



Basic Information

Catalog Number:

22023-1-AP

Size:

900 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16849

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 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 µg for 1.0-3.0 mg of total
protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse

Cited Species:

human, mouse

Positive Controls:

WB: Jurkat cells,

IP: Jurkat cells,

IHC: human breast cancer tissue, human colon cancer
tissue, human lymphoma tissue

IF: U-251 cells,

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

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.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------|-----------|---------------------|-------------|
| Qian Wang | 33015191 | J Diabetes Res | IF |
| Yitian Lu | 36071475 | J Neuroinflammation | WB |
| Bing Xin | 33125687 | Reprod Sci | WB |

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:

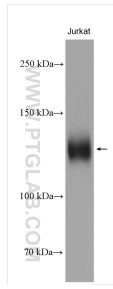
T: 4006900926

E: Proteintech-CN@ptglab.com

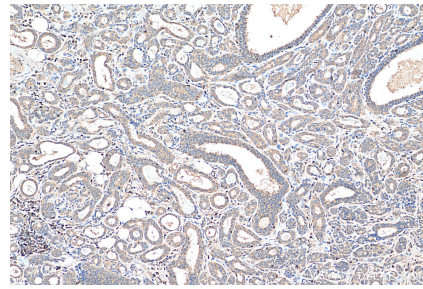
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

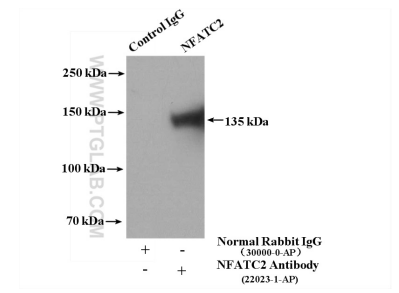
Selected Validation Data



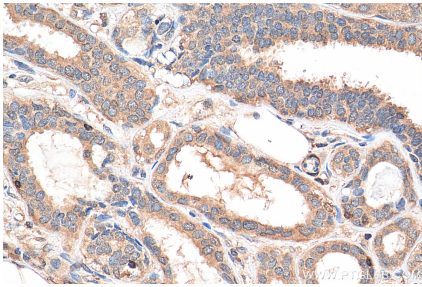
Jurkat cells were subjected to SDS PAGE followed by western blot with 22023-1-AP (NFATC2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



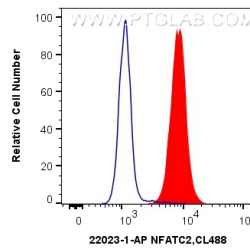
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22023-1-AP (NFATC2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



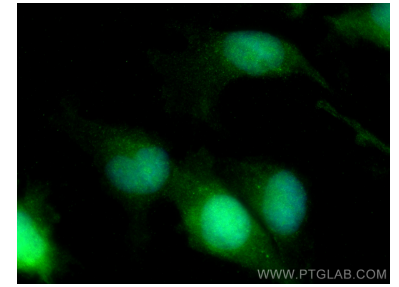
IP result of anti-NFATC2 (IP:22023-1-AP, 4ug; Detection:22023-1-AP 1:1000) with Jurkat cells lysate 3200ug.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22023-1-AP (NFATC2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human NFATC2 (22023-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed U-251 cells using NFATC2 antibody (22023-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).