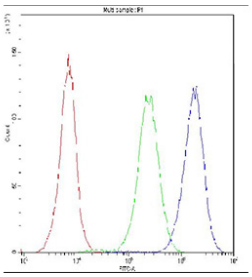
NFAT2 Antibody / NFATC1 (isoforms A/B/C) (R32829)

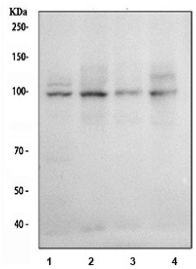
Catalog No.	Formulation	Size
R32829	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O95644
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA (human Recombinant Protein : 0.1-0.5ug/ml (BSA-free formulation available)
Limitations	This NFAT2 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human Jurkat cells with NFAT2 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=NFAT2 antibody.



Western blot testing of human 1) Jurkat, 2) Daudi, 3) Ramos and 4) Raji cell lysate with NFAT2 antibody at 0.5ug/ml. Predicted molecular weight: ~77 kDa (isoform A), ~88 kDa (isoform B), ~101 kDa (isoform C).

Description

NFAT2, also known as Nuclear Factor of Activated T cells 2, is a member of the NFAT transcription factor family that plays a central role in the regulation of gene expression during immune responses. NFAT2 is activated by calcium signaling through the phosphatase calcineurin, which dephosphorylates NFAT2 and allows its translocation into the nucleus. Once in the nucleus, NFAT2 interacts with other transcriptional regulators to modulate the expression of genes involved in T cell activation, differentiation, and cytokine production.

NFAT2 is expressed in various immune cell types, including T cells, B cells, and natural killer cells, and is also found in non-immune tissues such as the heart and nervous system. The gene encoding NFAT2 undergoes alternative splicing, producing multiple isoforms that differ in their regulatory domains and may have tissue-specific functions or differing responses to stimuli. These isoforms are important to consider when selecting an NFAT2 antibody for experimental use, as some antibodies may preferentially detect specific variants.

A high-quality NFAT2 antibody is essential for studying the mechanisms of immune regulation, T cell development, and inflammatory disease. The NFAT2 antibody offered by NSJ Bioreagents is validated for applications including western blotting, immunohistochemistry, and flow cytometry. This NFAT2 antibody enables researchers to reliably detect and quantify NFAT2 expression and localization across a range of biological contexts. Whether you are examining isoform-specific activity or general expression patterns, the NFAT2 antibody is a valuable tool in immunological and molecular research.

Application Notes

Optimal dilution of the NFAT2 antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids Q589-K652 (specific to isoforms A/B/C) was used as the immunogen for the NFAT2 antibody.

Storage

After reconstitution, the NFAT2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.