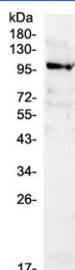


NFAT1 Antibody / NFATC2 (R32875)

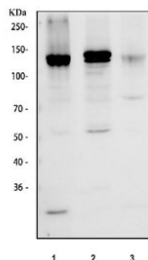
Catalog No.	Formulation	Size
R32875	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

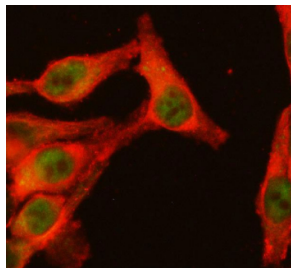
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13469
Localization	Nuclear, Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA (Recombinant Human Protein) : 0.1-0.5ug/ml (BSA-free format available)
Limitations	This NFAT1 antibody is available for research use only.



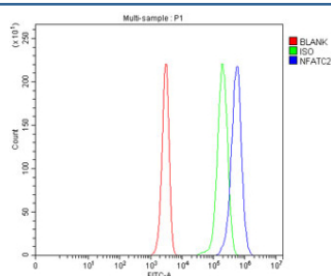
Western blot testing of human K562 cell lysate with NFAT1 antibody at 0.5ug/ml.
Predicted molecular weight ~100 kDa.



Western blot testing of human 1) Ramos, 2) Jurkat and 3) MOLT4 cell lysate with NFAT1 antibody at 0.5ug/ml. Predicted molecular weight ~100 kDa.



Immunofluorescent staining of FFPE human HeLa cells with NFAT1 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of fixed and permeabilized human Jurkat cells with NFAT1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NFAT1 antibody.

Description

NFATC2 (Nuclear factor of activated T-cells, cytoplasmic 2), also known as NFATP or the 'preexisting component' of NFAT, is present in the cytosolic fraction of unstimulated T cells, which is also a member of the nuclear factor of activated T cells (NFAT) family. The NFATC2 gene is mapped on 20q13.2. NFATC2 is highly homologous to NFATC1 over a limited domain which shows similarity to the Dorsal/Rel family but has a wider tissue distribution. Ectopic expression of NFATC2 inhibited the basal activity of the human CDK4 promoter. Additionally, both *Calna*^{-/-} and *Nfatc2*^{-/-} mice had elevated protein levels of Cdk4, confirming a negative regulatory role for the calcineurin/NFAT pathway. NFATC2 controls myoblast fusion at a specific stage of myogenesis after the initial formation of a myotube and is necessary for further cell growth. Overexpression of NFATC2 promoted differentiation of osteoclast precursor cells into tartrate-resistant acid phosphatase-positive (TRAP-positive) multinucleated osteoclast-like cells even in the absence of RANKL.

Application Notes

Optimal dilution of the NFAT1 antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids Q594-H676 was used as the immunogen for the NFAT1 antibody.

Storage

After reconstitution, the NFAT1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

