Datasheet for ABIN968123

anti-NFAT1 antibody (AA 29-181)

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Overview

Quantity:	50 µg
Target:	NFAT1
Binding Specificity:	AA 29-181
Reactivity:	Human, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NFAT1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	Human NFAT-1 aa. 29-181
Clone:	1-NFAT
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Source of all serum proteins is from USDA inspected abattoirs located in the United States. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Please refer to us for technical protocols.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	NFAT1
Alternative Name:	NFAT-1 (NFAT1 Products)
Background:	T cells are activated and induced to proliferate following binding of their respective antigen. The process of includes expression of genes that encode factors (i.e., cytokines) which regulate various cell types. Modulation of gene expression is conducted by an array of specific interactions between transcription factors and DNA. NFAT-1 (Nuclear Factor of Activated T cells) is a transcription factor that regulates expression of the interleukin-2 gene. Thus, NFAT-1 DNA binding activity is undetectable in resting cells, but increases during T-cell activation. NFAT-1, a protein of 921 amino acids, is part of an oligomeric transcription factor that also contains Fra-1 and JunB. NFAT-1 was initially described as a phosphoprotein and is dephosphorylated in activated T cells transformed with the leukemia virus HTLV-I. Synonyms: NF-ATc2, NFATP, KIAA0611
Molecular Weight:	97-135 kDa
Pathways:	RTK Signaling, WNT Signaling, Fc-epsilon Receptor Signaling Pathway, VEGF Signaling, BCR Signaling

Application Details

Comment:	Related Products: ABIN967389, ABIN968537, ABIN968619
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:

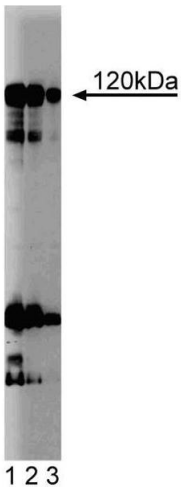
Grader-Beck, van Puijenbroek, Nadler, Boussiotis: "cAMP inhibits both Ras and Rap1 activation in primary human T lymphocytes, but only Ras inhibition correlates with blockade of cell cycle progression." in: **Blood**, Vol. 101, Issue 3, pp. 998-1006, (2003) (PubMed).

Kadereit, Mohammad, Miller, Woods, Listrom, McKinnon, Alali, Bos, Iacobucci, Sramkoski, Jacobberger, Laughlin: "Reduced NFAT1 protein expression in human umbilical cord blood T lymphocytes." in: **Blood**, Vol. 94, Issue 9, pp. 3101-7, (1999) (PubMed).

Good, Maggirwar, Harhaj, Sun: "Constitutive dephosphorylation and activation of a member of the nuclear factor of activated T cells, NF-AT1, in Tax-expressing and type I human T-cell leukemia virus-infected human T cells." in: **The Journal of biological chemistry**, Vol. 272, Issue 3, pp. 1425-8, (1997) (PubMed).

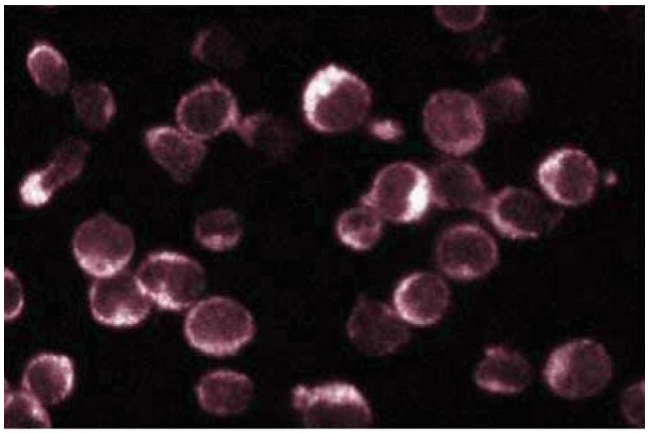
Boise, Petryniak, Mao, June, Wang, Lindsten, Bravo, Kovary, Leiden, Thompson: "The NFAT-1 DNA binding complex in activated T cells contains Fra-1 and JunB." in: **Molecular and cellular biology**, Vol. 13, Issue 3, pp. 1911-9, (1993) (PubMed).

McCaffrey, Luo, Kerppola, Jain, Badalian, Ho, Burgeon, Lane, Lambert, Curran: "Isolation of the cyclosporin-sensitive T cell transcription factor NFATp." in: **Science (New York, N.Y.)**, Vol. 262, Issue 5134, pp. 750-4, (1993) (PubMed).



Western Blotting

Image 1. Western blot analysis of NFAT-1 on a Jurkat cell lysate (Human T-cell leukemia, ATCC TIB-152). Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10,000 dilution of the mouse anti- NFAT-1 antibody. NFAT-1 may be identified migrating between 97-135 kDa.



Immunofluorescence

Image 2. Immunofluorescence staining of Jurkat cells (Human T-cell leukemia, ATCC TIB-152).

