

Technical Data Sheet

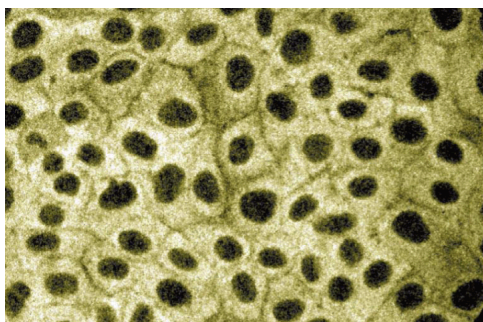
FITC Mouse Anti- NFAT-1**Product Information**

Material Number:	611960
Size:	50 µg
Concentration:	250 µg/ml
Clone:	1/NFAT-1
Immunogen:	Human NFAT-1 aa. 29-181
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Dog Tested in Development: Human
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

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-1.

This antibody is routinely tested by immunofluorescence microscopy. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Immunofluorescent staining of MDCK cells.

Preparation and Storage

Store undiluted at -20° C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes**Application**

Immunofluorescence	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
610702	Purified Mouse Anti- NFAT-1	50 µg	1/NFAT-1

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

- Boise LH, Petryniak B, Mao X, et al. The NFAT-1 DNA binding complex in activated T cells contains Fra-1 and JunB. *Mol Cell Biol.* 1993; 13(3):1911-1919. (Biology)
- Good L, Maggirwar SB, Harhaj EW, Sun SC. 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. *J Biol Chem.* 1997; 272(3):1425-1428. (Biology)
- Jascur T, Gilman J, Mustelin T. Involvement of phosphatidylinositol 3-kinase in NFAT activation in T cells. *J Biol Chem.* 1997; 272(22):14483-14488. (Biology)
- McCaffrey PG, Luo C, Kerppola TK, et al. Isolation of the cyclosporin-sensitive T cell transcription factor NFATp. *Science.* 1993; 262(5134):750-754. (Biology)