10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NFAT2 Picoband Antibody

Catalog # ABO12825

Product Information

Application	WB, E
Primary Accession	NFATC1: O95644
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for NFAT2 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Application Details	Western blot, 0.1-0.5 □g/ml Direct ELISA, 0.1-0.5 □g/ml
Subcellular Localization	Cytoplasm
Tissue Specificity	Expressed in thymus, peripheral leukocytes as T-cells and spleen. Isoforms A are preferentially expressed in effector T-cells (thymus and peripheral leukocytes) whereas isoforms B and isoforms C are preferentially expressed in naive T- cells (spleen). Isoforms B are expressed in naive T-cells after first antigen exposure and isoforms A are expressed in effector T- cells after second antigen exposure. Isoforms IA are widely expressed but not detected in liver nor pancreas, neural expression is strongest in corpus callosum. Isoforms IB are expressed mostly in muscle, cerebellum, placenta and thymus, neural expression in fetal and adult brain, strongest in corpus callosum.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human NFAT2 recombinant protein (Position: Q589-K652).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Background

NFATC1(Nuclear factor of activated T-cells, cytoplasmic 1), also known as NFATC or NFAT2, is a protein that in humans is encoded by the NFATC1 gene. And it is also a component of the nuclear factor of activated T cells DNA-binding transcription complex. The NFATC1 gene is mapped on 18q23. Proteins belonging to this family of transcription factors play a central role in inducible gene transcription during immune response. NFATC1 was not detected in brain, liver, or kidney. NFATC1 is an inducible nuclear component which functions as a major molecular target for the immunosuppressive drugs such as cyclosporin A. The solution structure of the binary complex formed between the core DNA-binding domain of human NFATC1 and the 12-bp oligonucleotide duplex containing the ARRE2 DNA site from the IL2 promoter. Nfatc1 was expressed exclusively in mouse hair follicle stem cells, and using gain- and loss-of-function approaches, and Nfatc1 inhibited stem cell activation.

Images

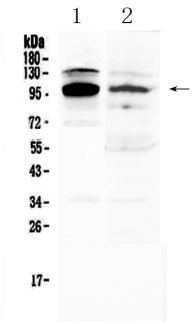


Figure 1. Western blot analysis of NFAT2 using anti-NFAT2 antibody (ABO12825). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse thymus tissue lysates,Lane 2: human 22RV1 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NFAT2 antigen affinity purified polyclonal antibody (Catalog # ABO12825) at 0.5 ug/mL overnight at 4 □□□, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for NFAT2 at approximately 101KD. The expected band size for NFAT2 is at 101KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.