NFATC1 Antibody

Catalog No: #32303

Product Name: NFATC1 Antibody
Host Species: Rabbit
Clonality: Polyclonal
Purification: Antibodies were purified by affinity purification using immunogen.
Applications: WB, IHC, IF
Species Reactivity: Human, Mouse, Rat
Specificity: The antibody detects endogenous level of total NFATC1 protein.
Immunogen Type: Recombinant Protein
Immunogen Description: Recombinant protein of human NFATC1.
Target Name: NFATC1
Other Names: MGC138448; NF-ATC; NFAT2; NFATc;
Accession No.: Swiss-Prot:O95644NCBI Gene ID:4772
SDS-PAGE MW: 78, 101KD
Concentration: 1.0mg/ml
Formulation: Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage: Store at -20°C

Application Details:

WB 1:500 - 1:3000
IHC 1:50 - 1:200
IF 1:50 - 1:200

Images:

Western blot analysis of extracts of various cell lines, using NFAT2 at 1:3000 dilution.
Background

The NFAT (nuclear factor of activated T cells) family of proteins consists of NFAT1 (NFATc2 or NFATp), NFAT2 (NFATc1 or NFATc), NFAT3 (NFATc4), and NFAT4 (NFATc3 or NFATx). All members of this family are transcription factors with a Rel homology domain and regulate gene transcription in concert with AP-1 (Jun/Fos) to orchestrate an effective immune response (1,2). NFAT proteins are predominantly expressed in cells of the immune system, but are also expressed in skeletal muscle, keratinocytes, and adipocytes, regulating cell differentiation programs in these cells (3). In resting cells, NFAT proteins are heavily phosphorylated and localized in the cytoplasm. Increased intracellular calcium concentrations activate the calcium/calmodulin-dependent serine phosphatase calcineurin, which dephosphorylates NFAT proteins, resulting in their subsequent translocation to the nucleus (2). Termination of NFAT signaling occurs upon declining calcium concentrations and phosphorylation of NFAT by kinases such as GSK-3.
or CK1 (3,4). Cyclosporin A and FK506 are immunosuppressive drugs that inhibit calcineurin and thus retain NFAT proteins in the cytoplasm (5).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.