

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NFATC3 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 646115
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NFATC3 Asp900-Asp1035 Accession # Q12968
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NFATC3 (Nuclear factor of activated T cells C3; also NFAT4 and NFATx) is a 145-150 kDa member of the NFAT family of transcription factors. NFATC3 is widely expressed being found in DP thymocytes, CD4⁺ T cells, smooth muscle cells, Schwann cells and mast cells. NFATC3 regulates gene transcription as part of a NFATC transcription complex. It is normally cytoplasmic and phosphorylated. Upon a rise in intracellular Ca²⁺, dephosphorylation occurs via calcineurin, and NFATC3 enters the nucleus. Human NFATC3 is 1075 amino acids (aa) in length. It contains a calcineurin binding site (aa 109-114), two NLSs (aa 273-275 and 686-688), one NES (aa 1032-1041) and an RHD that binds DNA (aa 433-592). There are multiple isoforms. Thirty amino acid, 33 aa and 10 aa substitutions for aa 1036-1075 are known that may be accompanied by an alternate start site at Met480. Over aa 900-1035, human NFATC3 shares 93% aa identity with mouse NFATC3.

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