

DESCRIPTION

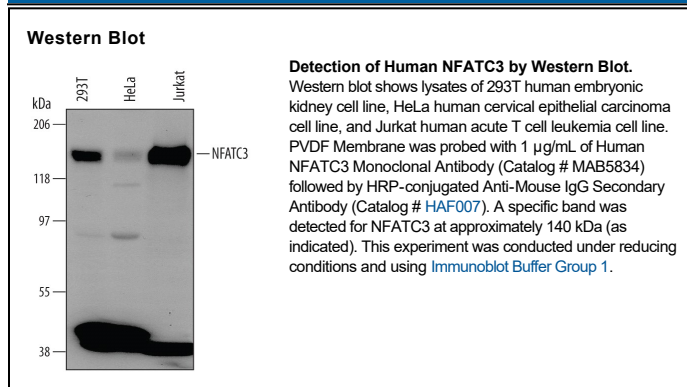
Species Reactivity	Human
Specificity	Detects human NFATC3 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 646115
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NFATC3 Asp900-Asp1035 Accession # Q12968
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.