

DESCRIPTION

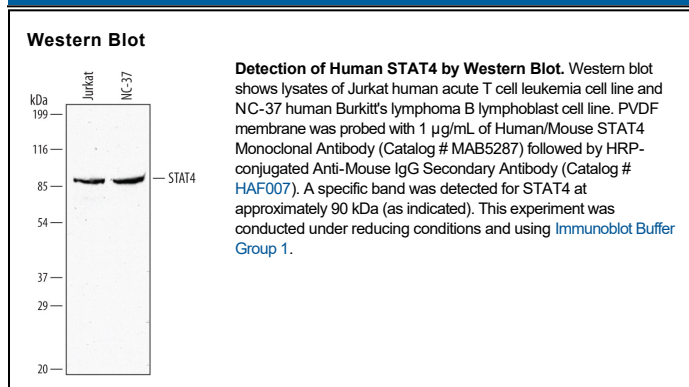
Species Reactivity	Human/Mouse
Specificity	Detects endogenous human STAT4 in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 513710
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human STAT4 Leu83-Lys162 Accession # Q14765
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	Reconstitute at 0.5 mg/mL in sterile PBS.
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

Signal transduction and activator of transcription 4 (STAT4) is a 86 kDa member of the Jak/STAT signal transduction pathway. Human STAT4 is 748 amino acids (aa) in length. STAT4 mediates cytokine signaling by acting as a signal transducer in the cytoplasm and, upon phosphorylation, homo- or heterodimerizes with other STAT proteins, which then translocate to the nucleus and activate transcription of specific genes. STAT4 contains a SH2 domain (aa 569-664) and a Jak1 phosphorylation site at Y693. STAT4 is involved in mediating IL-12 response in lymphocytes and regulating T helper cell differentiation, and STAT4 variants are found in patients with systemic lupus erythematosus.