

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
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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

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.

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