

DESCRIPTION

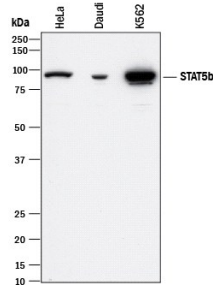
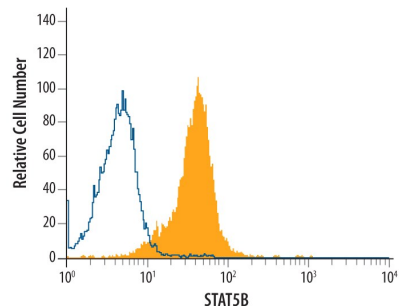
Species Reactivity	Human
Specificity	Detects human STAT5b in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 389215
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human STAT5b synthetic peptide MDSQWIPHAQS Accession # NP_036580
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human STAT5b by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, Daudi human Burkitt's lymphoma cell line, and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human STAT5b Monoclonal Antibody (Catalog # MAB1584) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for STAT5b at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of STAT5b in Jurkat Human Cell Line by Flow Cytometry. Jurkat human acute T cell leukemia cell line was stained with Mouse Anti-Human STAT5b Monoclonal Antibody (Catalog # MAB1584, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG F(ab')₂ Secondary Antibody (Catalog # F0101B).</p>
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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 5B (STAT5b) is a member of the Jak/STAT signal transduction pathway and is activated by a variety of cytokines (IL-22, IL-6, IFNα). Upon cytokine activation, STAT5b is phosphorylated and translocates to the nucleus where it binds to the DNA consensus site TTCN₃GAA and activates transcription of specific genes. STAT5b shares 93% amino acid identity with STAT5a. STAT5b is involved in a wide array of biological processes ranging from regulating apoptosis to adult mammary gland proliferation, differentiation and survival.