

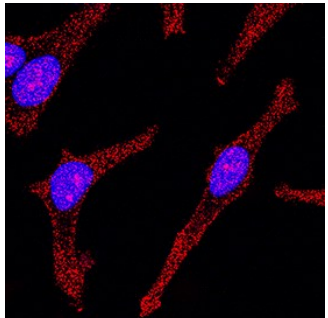
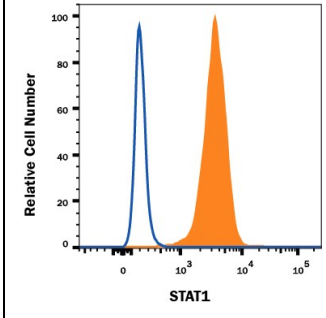
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human STAT1. Detects recombinant human STAT1 transfectants but not irrelevant transfectants.
Source	Monoclonal Rat IgG _{2B} Clone # 246523
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human STAT1 Met1-Gln194 Accession # P42224
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
Immunocytochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 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>Immunocytochemistry</p>  <p>STAT1 in HeLa Human Cell Line. STAT1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Rat Anti-Human STAT1 Monoclonal Antibody (Catalog # MAB1490) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL014) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of STAT1 in HeLa Human Cell Line by Flow Cytometry. HeLa human cervical epithelial carcinoma cell line was stained with Rat Anti-Human STAT1 Monoclonal Antibody (Catalog # MAB1490, filled histogram) or isotype control antibody (Catalog # MAB0061, open histogram) followed by APC-conjugated Goat anti-Rat IgG Secondary Antibody (Catalog # F0113). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.</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

STAT1 is a member of the STAT family of cytoplasmic transcription factors that mediate cytokine, growth factor and hormone receptor signal transduction. STAT1 is associated with type I and II interferon signaling. Phosphorylation of STAT1a at Y701 leads to dimerization and translocation to the nucleus to activate gene transcription. Human STAT1 shows 93% and 94% aa identity with mouse and rat STAT1, respectively, over the region used as an immunogen. This region is identical between isoforms STAT1a (91 kDa) and STAT1b (84 kDa).