

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human STAT1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 655210
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human STAT1 Ala687-Val750 Accession # P42224
<b>Formulation</b>	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.

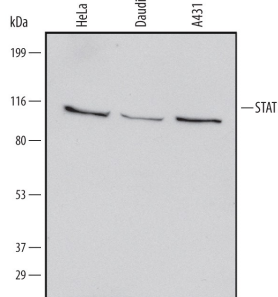
**APPLICATIONS**

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Knockout Validated</b>	STAT1 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in STAT1 knockout HeLa cell line.	

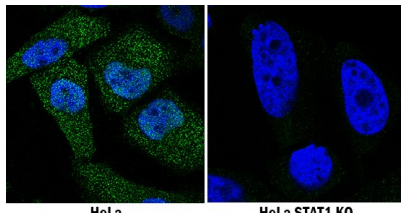
**DATA**

**Western Blot**



**Detection of Human STAT1 by Western Blot.**  
Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, Daudi human Burkitt's lymphoma cell line, and A431 human epithelial carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Mouse STAT1 Monoclonal Antibody (Catalog # MAB14091) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for STAT1 at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Knockout Validated**



**STAT1 Specificity is Shown by Immunocytochemistry in Knockout Cell Line.** STAT1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line treated with IFN-alpha 1 but is not detected in STAT1 knockout (KO) HeLa cell line using Mouse Anti-Human STAT1 Monoclonal Antibody (Catalog # MAB14901) at 1 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Mouse IgG Secondary Antibody (green; Catalog # NL009) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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).