

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human STAT6 when phosphorylated at Y641.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 1248D
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Phosphopeptide containing human STAT6 Y641 site. Accession # P42226
<b>Formulation</b>	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

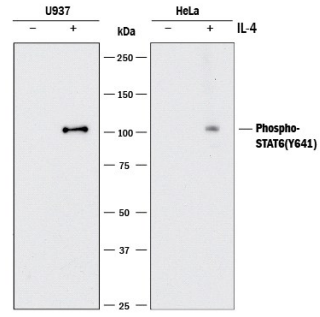
## APPLICATIONS

**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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	2-10 µg/mL	See Below

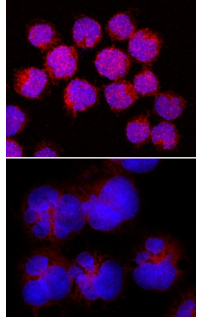
## DATA

**Western Blot**



**Detection of Human Phospho-STAT6 by Western Blot.** Western blot shows lysates of U937 human histiocytic lymphoma cell line and HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 100 ng/mL Recombinant Human IL-4 (Catalog # 204-IL) for 15 minutes or 2 ng/mL Recombinant Human IL-4 (Catalog # 204-IL) for 20 minutes, respectively. PVDF membrane was probed with 1 µg/mL of Rabbit Anti-Human Phospho-STAT6 (Y641) Monoclonal Antibody (Catalog # MAB3717) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for STAT6 at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**



**Phospho-STAT6 (Y641) in Daudi Human Cell Line.** STAT6 phosphorylated at Y641 was detected in immersion fixed Daudi human Burkitt's lymphoma cell line, untreated (lower panel) or treated with Recombinant Human IL-4 (Catalog # 204-IL; upper panel) using Rabbit Anti-Human Phospho-STAT6 (Y641) Monoclonal Antibody (Catalog # MAB3717) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. 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 °C, as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after opening.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after opening.</li> </ul>

## BACKGROUND

Signal Transducer and Activator of Transcription 6 (STAT6) mediates the signaling of cytokines such as IL-4 and IL-13. STAT6 acts as a signal transducer in the cytoplasm and, upon phosphorylation at Y641, translocates to the nucleus and binds to the DNA consensus site TTCN<sub>4</sub>GAA. Knockout studies in mice suggest that STAT6 functions in differentiation of T helper 2 (Th2) cells, expression of cell surface markers, and class switch of immunoglobulins.

## PRODUCT SPECIFIC NOTICES

\* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.