

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human STAT6 when phosphorylated at Y641.
Source	Monoclonal Rat IgG _{2B} Clone # 943015
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Phosphopeptide containing the human STAT6 Y641 site Accession # P42226
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.

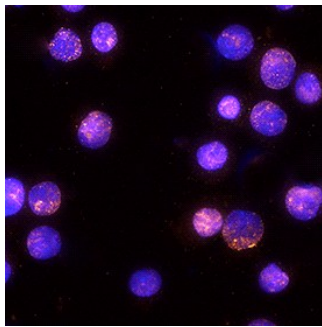
APPLICATIONS

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
Immunocytochemistry	5-25 µg/mL	See Below

DATA

Immunocytochemistry



Phospho-STAT6 Y641 in U937 Human Cell Line. STAT6 phosphorylated at Y641 was detected in immersion fixed U937 human histiocytic lymphoma cell line treated with Recombinant Human IL-4 (Catalog # 204-IL) using Rat Anti-Human Phospho-STAT6 Y641 Monoclonal Antibody (Catalog # MAB37172) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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 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 TTCN₄GAA. 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.