

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human STAT6 when phosphorylated at Y641.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1248D
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing human STAT6 Y641 site. Accession # P42226
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

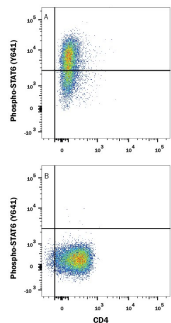
APPLICATIONS

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
Intracellular Staining by Flow Cytometry	10 μ L/ 10^6 cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of STAT6 in Human peripheral blood mononuclear cells (PBMCs) by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) either (A) Th2-stimulated or (B) unstimulated were stained with Rabbit Anti-Human Phospho-STAT6 (Y641) PE-conjugated Monoclonal Antibody (Catalog # IC37173P) and Mouse Anti-Human CD4 APC-conjugated Monoclonal Antibody (Catalog # FAB3791A). Quadrant markers were set based on control antibody staining (Catalog # IC1051P). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with methanol. View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

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.