Human/Mouse/Rat STAT3 PE-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 232209

Catalog Number: IC1799P

100 TESTS

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	The unconjugated antibody (Catalog # MAB1799) detects human, mouse, and rat STAT3 in Western blots.
Source	Monoclonal Mouse IgG_{2B} Clone # 232209
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human STAT3 Met1-Asn175 Accession # P40763
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.

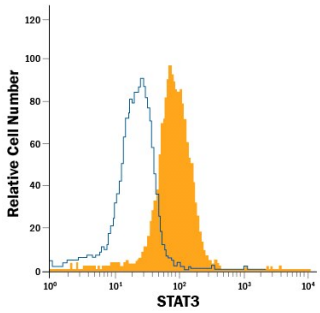
APPLICATIONS

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 µL/10^6 cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of STAT3 in Jurkat Human Cell Line by Flow Cytometry. Jurkat human acute T cell leukemia cell line was stained with Mouse Anti-Human/Mouse/Rat STAT3 PE-conjugated Monoclonal Antibody (Catalog # IC1799P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). 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.

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.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Signal Transducer and Activator of Transcription (STAT) proteins are transcription factors activated in response to cytokine, growth factor, or hormone receptor signaling. STAT3 is an 89-92 kDa, and most widely expressed, member of the STAT-family of molecules. STAT3 is considered a direct transcription factor; that is it does not act in an indirect way such as epigenetically through the regulation of DNA methylation. Activation/phosphorylation of STAT3 results in homodimerization or heterodimerization with STAT1, whereupon it enters the nucleus to principally promote cell cycle progression. The propensity of STAT3 and STAT5 toward cell division is of particular interest in oncology. Over amino acids 1-175 of STAT3 that include a protein-protein interaction domain and an NLS, human, rat and mouse show 100% amino acid sequence identity.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956