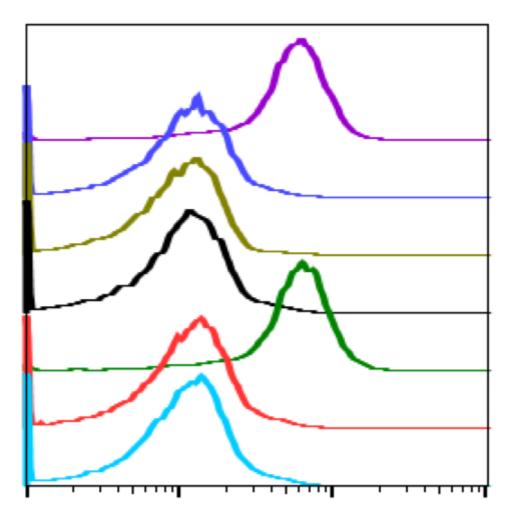
**Catalog:** #2221

Store at: -20ºC

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	lsotype	
Flow Cytometry	Anti-Rabbit IgG	Monoclonal	Rabbit IgGk	
Format:	Unconjugated			
Cross Reactivity:	Predicted to work with mouse, rat, and other homologues.			
Formulation:	1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA			
Preparation:	Protein A+G			
Reactivity:	Human,Mouse			
Recommended Usage:	$1\mu$ g/mL – 0.001 $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.			
Immunogen:	A synthetic phospho-peptide corresponding to residues surrounding Tyr701 of human phospho Stat1			
<b>Description:</b>	Stat1 mediates the cellular response to IFN $\alpha$ , IFN $\beta$ , and IFN $\gamma$ for the regulation of cell growth and the defense against viral and immune challenges. The Jak-Stat pathway plays a central role in the IFN $\gamma$ response, where Stat1 phosphorylation on Tyr701 causes homodimerization through its SH2 domain, translocation to the nucleus, and binding to gamma-activated sequence (GAS) elements. Early in the activation sequence, Stat1 is also phosphorylated at Ser727 through a mechanism involving PI3 kinase and Akt. Stat1 has been found to correlate with increased resistance to chemotherapeutic drugs. However, Stat1 activation of the immune system helps suppress tumor growth, and multiple melanomas and squamous-cell carcinomas have been known to downregulate Stat1 expression to evade immune surveillance.			
References:	Ramana CV, Gil MP, Schreiber RD, and Stark GR. (2002) Trends in Immunology. 23: 96-101. Avalle L, Pensa S, Regis G, Novelli F, and Poli V. (2012) JAK-STAT. 1: 65-72.			

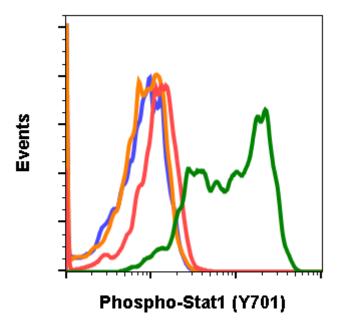




SampleID	Count	Median : BL1-A
IFN 3E6 N	9771	5586
Qrl 3E6 N	19790	1089
IFN 3E6 P	7520	971
Qrl 3E6 P	16840	1051
IFN 3E6	10436	5909
Ctrl 3E6	19084	1119
<b>Ctrl 2' only</b>	21520	1053

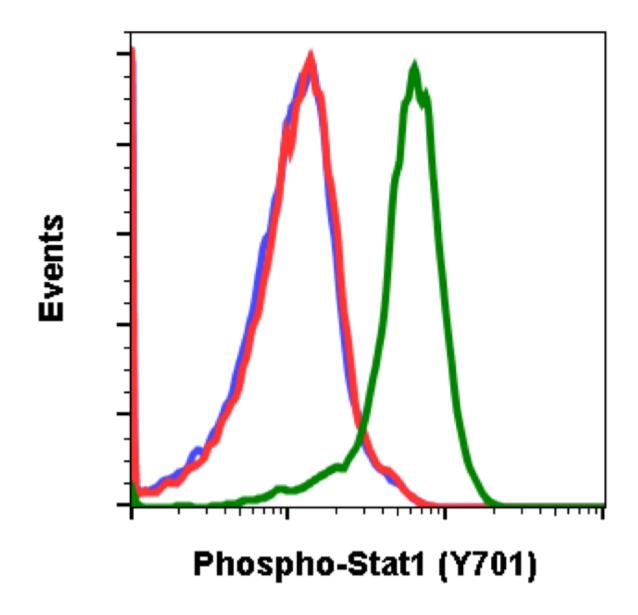
Peptide blocking flow cytometric analysis of U937 cells secondary antibody only negative control (light blue) or untreated (red) or treated with IFN $\alpha$  IL-4 and pervanadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and bl





Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or 0.1 µg/mL of isotype control Cat. #2141 (orange) or treated with imatinib (red) or with pervanadate (green) using Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 at 0.1 µg/mL. Cat #2221.

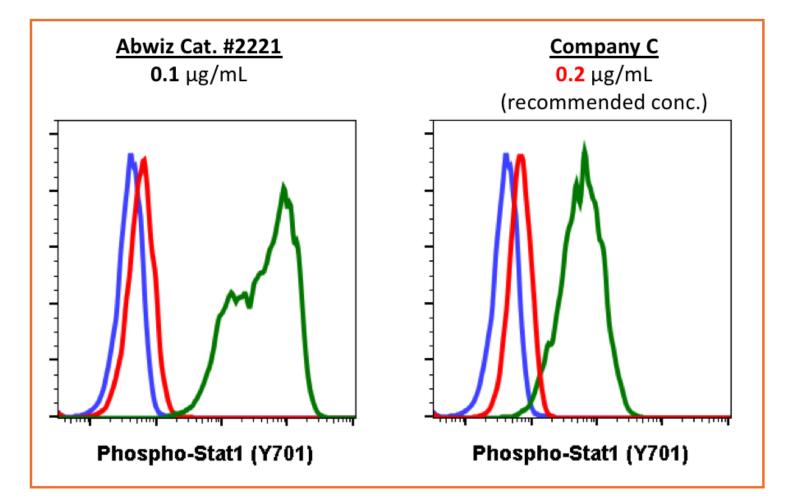




Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN $\alpha$  IL-4 and pervanadate (green) using Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 at 0.005 µg/mL Cat. #2221.







Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN $\alpha$  + IL-4 + pervanadate (green) using 0.1 ug/mL of Phospho-Stat1 (Tyr701) antibody Stat1Y701-3E6 Cat. #2221 or Company C antibody at 0.2 ug/mL (manufacturer's recommended concentration).

