Phospho-Stat4 (Tyr693) (F6) rabbit mAb

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Order: sales@abwizbio.com

Catalog: #2281

Store at: -20ºC

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

Applications	Detection	Clonality	Isotype
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

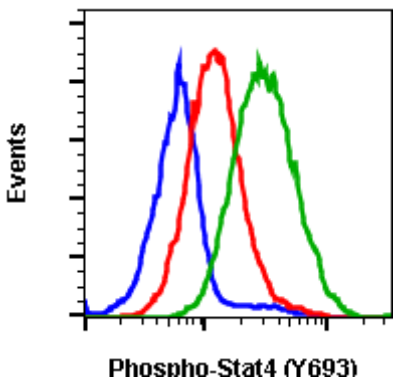
Recommended Usage: 1µg/mL – 0.001µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.

Immunogen: A synthetic phospho-peptide corresponding to residues surrounding Tyr693 of human phospho Stat4

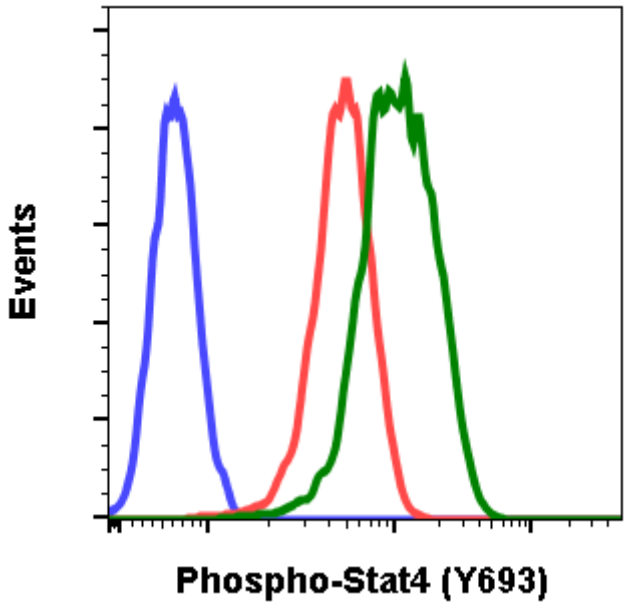
Description: In response to IL-12 binding, the IL-12 receptor activates the Jak kinases, which phosphorylate tyrosine residues of IL-12Rβ2. These phosphorylated receptors recruit Stat4 through its SH2 domain, whereupon Stat4 is phosphorylated at Tyr693 in its C-terminal transactivation domain. Phosphorylation promotes Stat4 homodimerization and translocation to the nucleus, where it promotes gene transcription. The N-terminal domain of Stat4 appears to be required for maximal stabilization and for the binding of Stat4 dimers to lower-affinity DNA binding sites. Stat4-deficient mice have demonstrated that this gene is required to both promote Th1 development and inhibit Th2 differentiation due to disabling IL-12 receptor-mediated responses.

References:

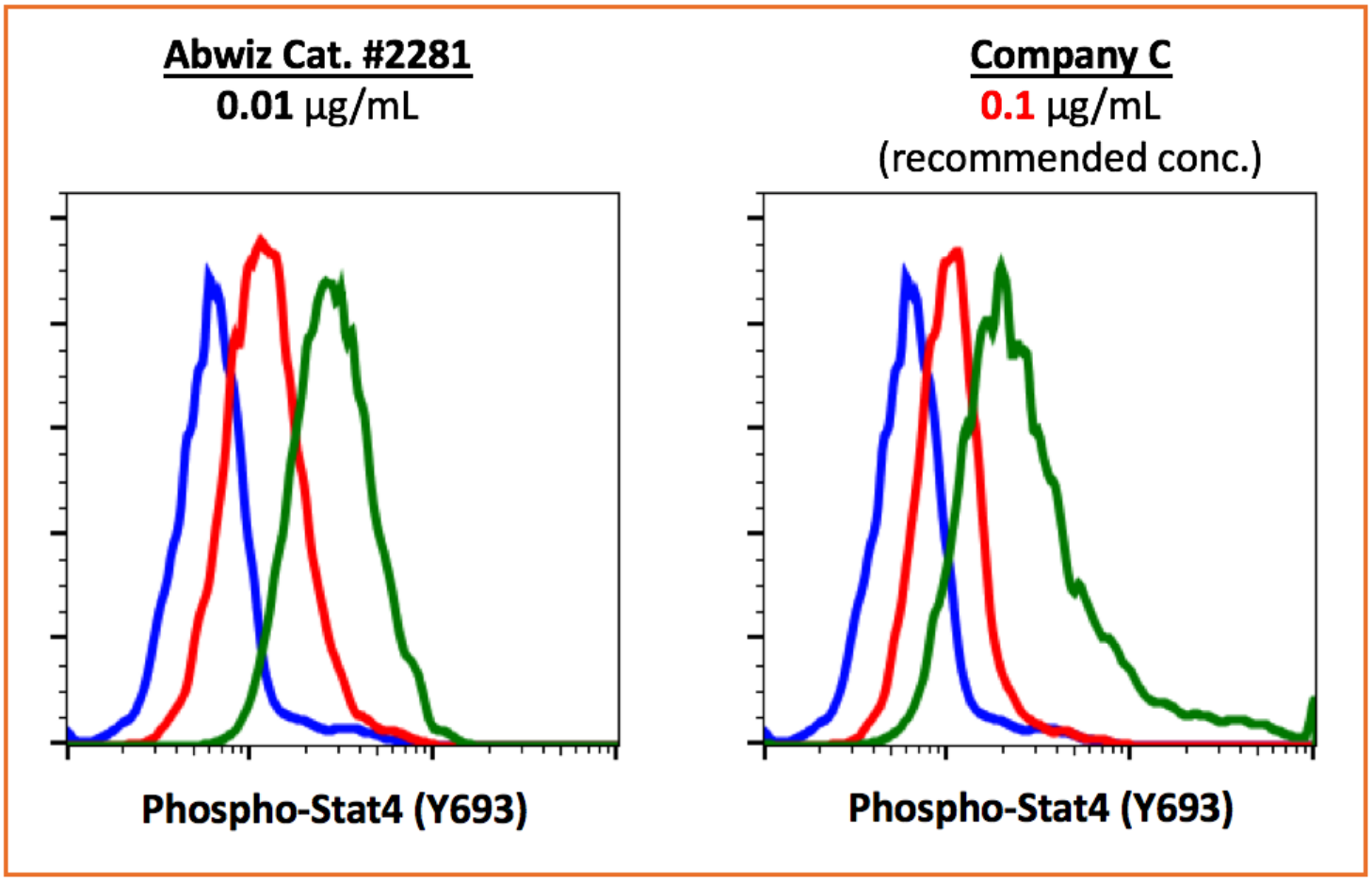
Kaplan MH, Sun Y, Hoey T, and Grusby MJ. (1996) Nature. 382: 174-177.
Chang H, Zhang S, Oldham I, Naeger L, Hoey T, and Kaplan MH. (2003) Journal of Biological Chemistry. 278: 32471-32477.



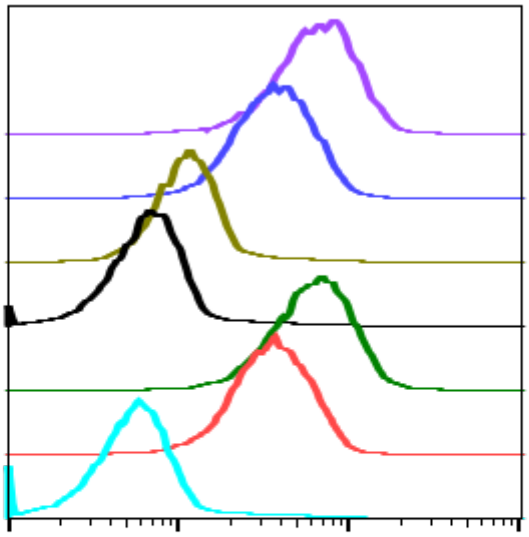
Flow cytometric analysis of K562 cells unstained and treated with imatinib as negative control (blue) or treated with imatinib and stained (red) or treated with IFNα + IL-4 + pervanadate and stained (green) using Phospho-Stat4 (Tyr693) antibody Stat4Y693-F6 at 0.01 µg/mL. Cat #2281.



Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using Phospho-Stat4 (Tyr693) antibody Stat4Y693-F6 at 0.1 µg/mL. Cat #2281.



Flow cytometric analysis of K562 cells secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using 0.01 ug/mL of Phospho-Stat4 (Tyr693) antibody Stat4Y693-F6 Cat. #2281 or Company C at 0.1 ug/mL (manufacturer's recommended concentration).



	SampleID	Treatment	Peptide Block	Median : BL1-A
	F6	IFN	Non-phos.	6432
	F6	Ctrl	Non-phos.	3583
	F6	IFN	Phospho.	1119
	F6	Ctrl	Phospho.	665
	F6	IFN	-	6146
	F6	Ctrl	-	3481
	2' only	Ctrl	-	551

Peptide blocking flow cytometric analysis of K562 cells secondary antibody only negative control (light blue) or untreated (grey) or IFNα + IL-4 + pervanadate-treated (orange) using 0.1 µg/mL isotype control Cat. #2141 or untreated (red) or treated (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 blocked with non-phospho peptide (purple) using Phospho-Stat4 (Tyr693) antibody Stat4Y693-F6 at 0.1 µg/mL. Cat. #2281.