

## 12-4235: Phospho-Stat4 (Tyr693) (Clone: F6) rabbit mAb SureLight488 conjugate

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	Stat4Y693-F6
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	SureLight 488
<b>Format :</b>	Conjugated
<b>Alternative Name :</b>	Signal transducer and activator of transcription 4
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	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-12RB2. 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.

### Product Info

<b>Amount :</b>	10 Tests / 100 Tests
<b>Content :</b>	1X PBS, 0.09% NaN <sub>3</sub> , 0.2% BSA
<b>Storage condition :</b>	Store at 2-8°C. Avoid repeated freeze and thaw cycles.

### Application Note

For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

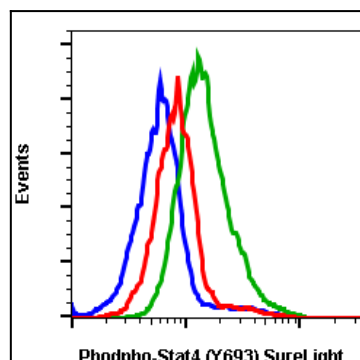


Fig-1: Flow cytometric analysis of K562 cells treated with imatinib and unstained as negative control (blue) or treated with imatinib and stained (red) or treated with IFN $\alpha$  + IL-4 + pervanadate and stained (green) using Phospho-Stat4 (Tyr693) antibody Stat4Y693-F6.