

# Phospho-Stat5 (Tyr694) (B5) rabbit mAb

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## #2251

Store at: -20°C

**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% NaN<sub>3</sub>, 50% Glycerol, 0.1% BSA

**Preparation:** Protein A+G

**Reactivity:** Human, Mouse

### Recommended

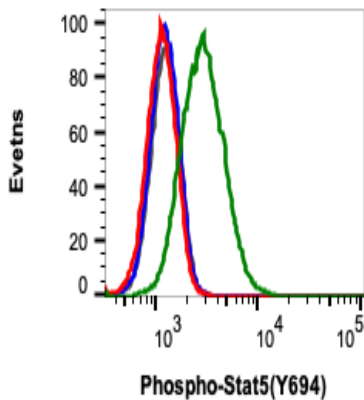
**Usage:** 1.00 - 0.001 µg/mL.  
It is recommended that the reagent be titrated for optimal performance for each application.  
See product image legends for additional information.

**Immunogen:** A synthetic phospho-peptide corresponding to residues surrounding Tyr694 of human phospho Stat5

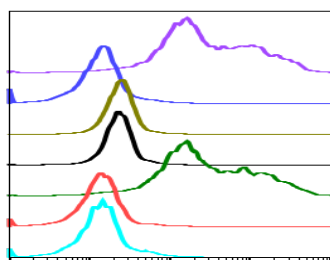
**Description:** Stat5 activation occurs in response to many ligands including prolactin, IL-2, growth hormone, and GM-CSF. Tyr694 phosphorylation is obligatory activation of Stat5 (1,2), and is mediated by Src upon erythropoietin stimulation (3). Phospho Stat5 is constitutively active in some leukemic cell types (4), and phospho Stat5 is found in some endothelial cells when treated with IL-3, suggesting its involvement in cell motility and angiogenesis (5). Stat5 has been shown to be encoded by two separate genes, Stat5a and Stat5b, which share over 90% amino acid sequence identity. In different cell types, Stat5a and Stat5b are independently regulated and activated. For example, interferon treatment predominantly activates Stat5a in U937 cells and Stat5b in HeLa cells (6).

### References:

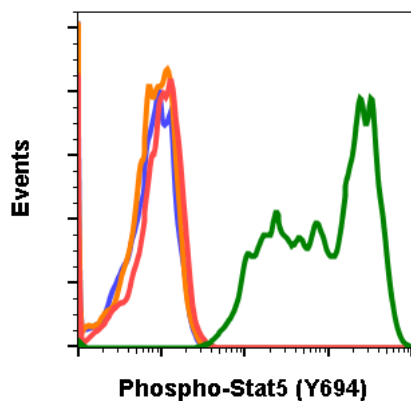
1. Gouilleux, F. et al. (1994) EMBO J. 13:4361-4369.
2. Wakao, H. et al. (1994) EMBO J. 13:2182-2191.
3. Okutani, Y. et al. (2001) Oncogene. 20:6643-6650.
4. Demoulin, J.B. et al. (1999) J. Biol. Chem. 274:25855-25861.
5. Dentelli, P. et al. (1999) J. Immunol. 163:2151-2159.
6. Meinke, A. et al. (1996) Mol. Cell. Biol. 16:6937-6944.



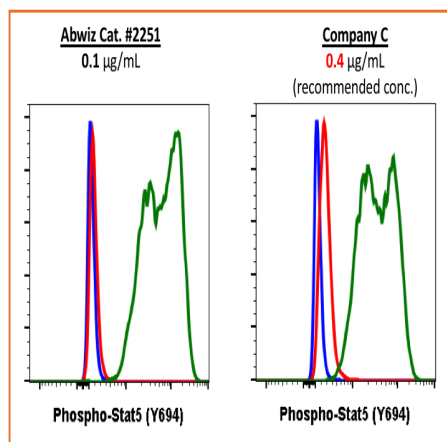
Flow cytometric analysis of Ramos cells untreated (red) or treated with IFN $\alpha$ +IL-4+pervanadate (green) using Phospho-Stat5(Tyr694) antibody at 0.05 ug/mL, Stat5Y694-B5 #2251, or concentration-matched rabbit (G9) mAb IgG Isotype Control #2141 for cells untreated (black) or treated with IFN $\alpha$ +IL-4+pervanadate (blue).



Peptide blocking flow cytometric analysis of K562 cells secondary antibody only negative control (light blue) or treated with imatinib (red) or pervanadate-treated (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) using Phospho-Stat5 (Tyr694) antibody Stat5Y694-B5 at 0.1  $\mu$ g/mL. Cat. #2251.



Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or 0.1  $\mu$ g/mL of isotype control Cat. #2141 (orange) or treated with imatinib (red) or with pervanadate (green) using Phospho-Stat5 (Tyr694) antibody Stat5Y694-B5 at 0.1  $\mu$ g/mL. Cat #2251.



Flow cytometric analysis of 3T3 cells secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using 0.1 ug/mL of Phospho-Stat5 (Tyr694) antibody Stat5Y694-B5 (Abwiz Cat. #2251) or Company C antibody at 0.4 ug/mL (manufacturer's recommended concentration).