

12-4260: Phospho-Stat5 (Tyr694) (Clone: G11) rabbit mAb

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| Clonality : | Monoclonal |
| Clone Name : | Stat5Y694-G11 |
| Application : | FACS, WB |
| Reactivity : | Human, Mouse |
| Conjugate : | Unconjugated |
| Format : | Purified |
| Alternative Name : | Signal transducer and activator of transcription 5A, STAT5A, Signal transducer and activator of transcription 5B, STAT5B |
| Isotype : | Rabbit IgG1k |
| Immunogen Information : | 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).

Product Info

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| Amount : | 20 µl / 200 µl |
| Content : | 1X PBS, 0.02% NaN ₃ , 50% Glycerol, 0.1% BSA |
| Storage condition : | Store at -20°C. Avoid repeated freeze and thaw cycles. |

Application Note

1 µg/mL - 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. (0.5mg/ml, more than 200 western blots)

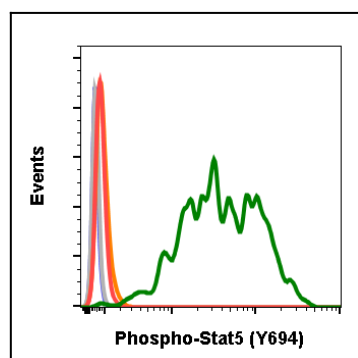


Fig-1: Flow cytometric analysis of 3T3 cells secondary antibody only negative control (blue) or untreated (grey) or treated with pervanadate (orange) using 0.1 µg/mL isotype control or untreated (red) or pervanadate (green) using Phospho-Stat5 (Tyr694) antibody Stat5Y694-G11 at 0.1 µg/mL.

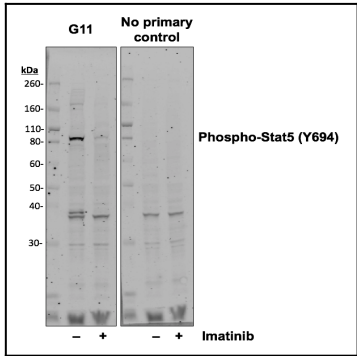


Fig 2 : Western blot analysis of K562 cell extract untreated or treated with imatinib using 0.01µg/mL Phospho-Stat5 (Tyr694) antibody Stat5Y694-G11. Also shown is a control blot at the same exposure level and omitting only the primary antibody.

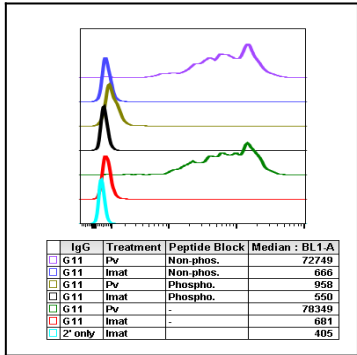


Fig-3: Peptide blocking flow cytometric analysis of 3T3 cells secondary antibody only negative control (light blue) or treated with imatinib (red) or pervanadate-treated (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) using Phospho-Stat5 (Tyr694) antibody Stat5Y694-G11 at 0.1 µg/mL.

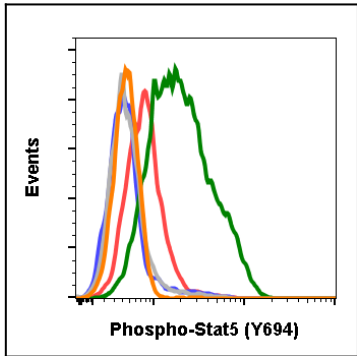


Fig-4: Flow cytometric analysis of K562 cells secondary antibody only negative control (blue) or untreated (grey) or treated with pervanadate (orange) using 0.1 µg/mL isotype control or untreated (red) or pervanadate (green) using Phospho-Stat5 (Tyr694) antibody Stat5Y694-G11 at 0.1 µg/mL.

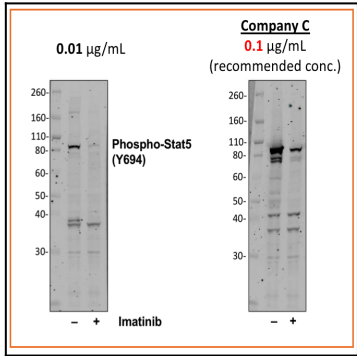


Fig-5: Western blot analysis of K562 cell extract untreated or treated with imatinib using 0.01 µg/mL Phospho-Stat5 (Tyr694) antibody Stat5Y694-G11 or Company C antibody at 0.1 µg/mL (manufacturer's recommended concentration) developed using the same exposure.