Phospho-Stat5 (Tyr694) (G11) rabbit mAb FITC Conjugate

#2328

Store at: 2-8ºC

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

Applications	Detection	Clonality	Isotype
Flow Cytometry	N/A	Monoclonal	Rabbit IgGk

Format: FITC

Cross Reactivity: Predicted to work with mouse, rat and other homologues.

Formulation: 1X PBS, 0.09% NaN3, 0.2% BSA

Preparation: Protein A+G

Reactivity: Human,Mouse

Recommended Usage: For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. 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 NIH3T3 cells treated with imatinib (red) or treated with pervanadate (green) using Phospho-STAT5 (Tyr694) (G11) Rabbit mAb (FITC Conjugate) Stat5Y694-G11 #2328, or concentration-matched Rabbit (G9) mAb IgG Isotype Control (FITC Conjugate) #2143 for cells treated with imatinib (black) or treated with pervanadate.