

Purified anti-STAT5 Phospho (Tyr694) Antibody

Catalog# / Size	936902 / 100 µg
Clone	A17016B.Rec
Regulatory Status	RUO
Other Names	Signal transducer and activator of transcription 5A
Isotype	Mouse IgG1, κ
Description	STAT5 is a member of the signal transducer and activator of transcription factors (STAT) family, mediating growth and cytokine signaling. STAT5 consists of two closely related family members, STAT5A and STAT5B, which exhibit 96% sequence homology and are functionally redundant. Upon activation, STAT5 is phosphorylated by receptor tyrosine kinases and, in turn, forms homodimers or heterodimers with other family members through its SH2 domains. The dimerized STAT5 translocates to the nucleus and binds to the STAT5 response element (TTCXXGAA). STAT5 plays crucial regulatory roles in cell proliferation, anti-apoptosis, early B cell differentiation, and T cell development.

Product Details

Verified Reactivity	Human
Antibody Type	Recombinant
Host Species	Mouse
Immunogen	Peptide from Human Stat5A phosphorylated at Tyr694
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	ICFC - Quality tested WB - Verified
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤0.06 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This recombinant antibody clone is derived from clone A17016B. No changes or modifications were done to the antibody sequence or scaffold.
Product Citations	1. Quijano-Rubio A, <i>et al.</i> 2022. Nat Biotechnol. Online ahead of print. PubMed
RRID	AB_2861121 (BioLegend Cat. No. 936902)

Antigen Details

Structure	794 amino acids, predicted molecular weight of 91 kD; contains a SH2 domains responsible for homodimerization or heterodimerization.
Distribution	Cytoplasm; phosphorylated form translocates to the nucleus.
Function	STAT5 is a transcription regulator and is involved in cell differentiation, proliferation, and survival, in response to several cytokines, such as interleukins, erythropoietin, growth hormone, thrombopoietin, and prolactin.

Antigen References

1. Bell BD, *et al.* 2013. *Nat. Immunol.* 14:364.
2. Cholez E, *et al.* 2012. *Leukemia.* 26:2390.
3. Heltemes-Harris LM, *et al.* 2012. *Curr. Opin. Immunol.* 24:146.
4. Heltemes-Harris LM, *et al.* 2011. *Ann. N Y Acad. Sci.* 1217:18.
5. Malin S, *et al.* 2010. *Curr. Opin. Immunol.* 22:168.
6. Xu J, *et al.* 2009. *J. Neurosci.* 29:2022.

Gene ID

[6776](#)

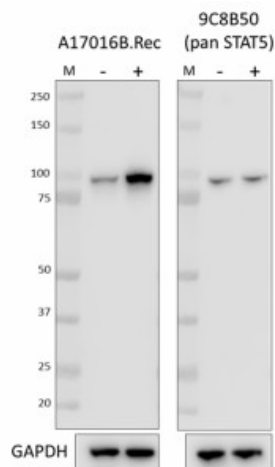
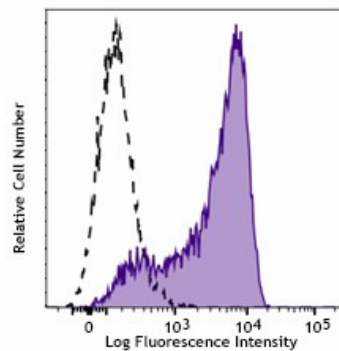
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-STAT5 Phospho (Tyr694), Purified anti-STAT5 Phospho (Tyr694), APC anti-STAT5 Phospho (Tyr694), PE/Cyanine7 anti-STAT5 Phospho (Tyr694)

Product Data



Human peripheral blood mononuclear cells were treated with (filled histogram), or without (open histogram) recombinant human IL-2 for 15 minutes, fixed with fixation buffer (Cat. No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat. No. 425401) then stained with purified anti-STAT5 Phospho (Tyr694) (clone A17016B.Rec), and followed by anti-mouse IgG1, κ PE. Data was gated on the lymphocyte population.

Whole cell extracts (15 µg protein) from serum-starved NK-92 cells untreated (-) or treated (+) with 100 ng/mL IL-2 for 20 minutes were resolved on a 4-12% Bis-Tris gel, transferred to a PVDF membrane and probed with 1.0 µg/mL (1:500 dilution) of purified anti-STAT5 Phospho (Tyr694) antibody (clone A17016B.Rec) for 2 hours at room temperature. Proteins were visualized by chemiluminescence detection using HRP goat anti-mouse IgG antibody (Cat. No. 405306) at a 1:3000 dilution. Equal STAT5 loading was confirmed by probing membranes with 1.0 µg/mL (1:500 dilution) of purified anti-STAT5 antibody (clone 9C8B50, Cat. No. 660202). Direct-Blot™ HRP anti-GAPDH antibody (Cat. No. 607904) was used as a loading control at a 1:25000 dilution (lower). Lane M: Molecular weight marker

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