Phospho-STAT5 (Tyr694) Monoclonal Antibody (SRBCZX), APC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Mouse
Published Species	Dog, Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	SRBCZX
Conjugate	APC
Excitation/Emission Max	651/660 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573272

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	12 Publications

Product Specific Information

Description: This SRBCZX monoclonal antibody recognizes signal transducer and activator of transcription 5 (STAT5) when phosphorylated on tyrosine 694. STAT proteins are activated by ligand binding to receptors, such as cytokine receptors, that associate with Janus kinase (JAK) family members. Following their phosphorylation by JAKs, STAT proteins translocate to the nucleus where they bind to DNA and regulate transcription of specific genes in a cell type- and cytokine-specific manner. In response to cytokines that signal through the common gamma chain such as IL-2, IL-7, and IL-15, STAT5 is phosphorylated on tyrosine 694 by JAK1 and JAK3. Cytokines such as IL-3, IL-5, and GM-CSF that signal via the common beta chain induce STAT5 phosphorylation on tyrosine 694 by JAK 2. Phosphorylation of STAT5 on tyrosine 694 is essential for STAT5 dimer formation, nuclear translocation, and DNA binding activity.

Specificity of this SRBCZX clone was determined by ELISA and flow cytometry.

Applications Reported: This SRBCZX antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This SRBCZX antibody has been pre-titrated and tested by intracellular staining followed by flow cytometric analysis of stimulated normal peripheral blood cells. This can be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined

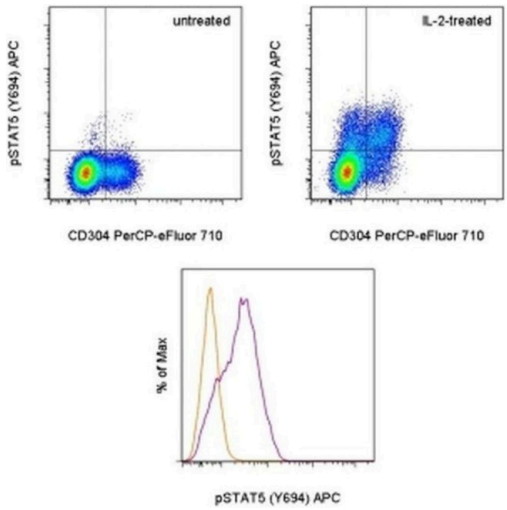
empirically but can range from 10^5 to 10^8 cells/test.

Staining Protocol: We recommend using Protocol C: Two-step protocol: Fixation/Methanol. Protocol A: Two-step protocol: intracellular (cytoplasmic) proteins and Protocol B: One-step protocol: intracellular (nuclear) proteins cannot be used. All Protocols can be found in the Flow Cytometry Protocols: "Staining Intracellular Antigens for Flow Cytometry Protocol" located in the Best Protocols Section under the Resources tab online.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Phospho-STAT5 (Tyr694) Monoclonal Antibody (SRBCZX), APC, eBioscience™



Phospho-STAT5 (Tyr694) Antibody (17-9010-42) in Flow
TOP: Intracellular staining of untreated (left) or 15-minute IL-2-treated (right) mouse splenocytes with Anti-Mouse CD304 (Neuropilin-1) PerCP-eFluor® 710 (Product # 46-3041-82) and Anti-Human/Mouse phospho-STAT5 (Y694) APC. CD4+ cells in the lymphocyte gate were used for analysis. BOTTOM: Intracellular staining of untreated (orange histogram) or 15-minute IL-2-treated (purple histogram) mouse splenocytes with Anti-Human/Mouse phospho-STAT5 (Y694) APC. CD4+CD304+ cells in the lymphocyte gate were used for analysis. In both panels, cells were stained using the Fixation/Methanol protocol.

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13 References

Immunohistochemistry (Paraffin) (1)

Cells

GRIM19 Impedes Obesity by Regulating Inflammatory White Fat Browning and Promoting Th17/Treg Balance.

"17-9010-42 was used in Immunohistochemistry (Paraffin) to suggest that GRIM19 attenuates the progression of obesity by controlling adipocyte differentiation."

Authors: Jhun J,Woo JS,Lee SH,Jeong JH,Jung K,Hur W,Lee SY,Ryu JY,Moon YM,Jung YJ,Song KY,Chang K,Yoon SK,Park SH,Cho ML

Year
2021

Species
Mouse

Flow Cytometry (12)

Nature

Neonatal imprinting of alveolar macrophages via neutrophil-derived 12-HETE.

"17-9010-42 was used in Flow cytometry/Cell sorting to highlight the complexity of prenatal RTM programming and reveal their dependency on in trans eicosanoid production by neutrophils for lifelong self-renewal."

Authors: Pernet E,Sun S,Sarden N,Gona S,Nguyen A,Khan N,Mawhinney M,Tran KA,Chronopoulos J,Amberkar D,Sadeghi M,Grant A,Wali S,Prevel R,Ding J,Martin JG,Thanabalasuriar A,Yipp BG,Barreiro LB,Divangahi M

Year
2023

Species
Mouse
Dog

Journal of translational medicine

GM-CSF impairs erythropoiesis by disrupting erythroblastic island formation via macrophages.

"Published figure using Phospho-STAT5 (Tyr694) monoclonal antibody (Product # 17-9010-42) in Flow Cytometry"

Authors: Cao W,Fan W,Wang F,Zhang Y,Wu G,Shi X,Shi JX,Gao F,Yan M,Guo R,Li Y,Li W,Du C,Jiang Z

Year
2022

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More applications with references on thermofisher.com

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