

# Phospho-STAT6 (Tyr641) Monoclonal Antibody (CHI2S4N), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Mouse
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	CHI2S4N
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 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_2573862

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	3 Publications

## Product Specific Information

**Description:** This CHI2S4N monoclonal antibody recognizes human and mouse signal transducer and activator of transcription 6 (STAT6) when phosphorylated on tyrosine 641. 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 IL-4, STAT6 is phosphorylated on tyrosine 641 by JAK1 and JAK3. STAT6 signaling downstream of the IL-4 receptor promotes T cell growth and B cell production of IgE.

Specificity of this CHI2S4N clone was determined by ELISA and flow cytometry.

**Applications Reported:** This CHI2S4N antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

**Applications Tested:** This CHI2S4N antibody has been pre-titrated and tested by intracellular staining followed by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5 µL (0.03 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<sup>5</sup> to 10<sup>8</sup> 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.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

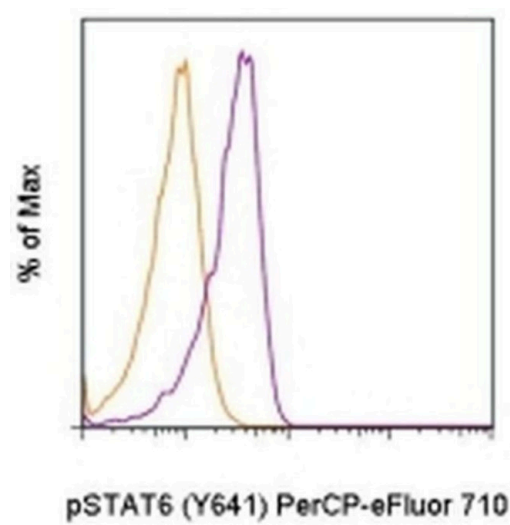
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For Phospho-STAT6 (Tyr641) Monoclonal Antibody (CHI2S4N), PerCP-eFluor™ 710, eBioscience™**



**Phospho-STAT6 (Tyr641) Antibody (46-9013-42) in Flow**  
Intracellular staining of unstimulated (orange histogram) or 15-minute IL-4-stimulated (purple histogram) Th2-polarized CD4+ T cells with Anti-Human /Mouse phospho-STAT6 (Y641) PerCP-eFluor® 710. Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://thermofisher.com)

Flow Cytometry (3)

<p>Nature communications</p> <p><b>Neutrophil extracellular traps and their histones promote Th17 cell differentiation directly via TLR2.</b></p> <p>"Published figure using Phospho-STAT6 (Tyr641) monoclonal antibody (Product # 46-9013-42) in Flow Cytometry"</p> <p>Authors: Wilson AS,Randall KL,Pettitt JA,Ellyard JI,Blumenthal A,Enders A,Quah BJ,Bopp T,Parish CR,Brüstle A</p>	<p>Year</p> <p>2022</p>
<p>The Journal of experimental medicine</p> <p><b>The Toxoplasma gondii virulence factor ROP16 acts in cis and trans, and suppresses T cell responses.</b></p> <p>"Published figure using Phospho-STAT6 (Tyr641) monoclonal antibody (Product # 46-9013-42) in Flow Cytometry"</p> <p>Authors: Chen L,Christian DA,Kochanowsky JA,Phan AT,Clark JT,Wang S,Berry C,Oh J,Chen X,Roos DS,Beiting DP, Koshy AA,Hunter CA</p>	<p>Year</p> <p>2020</p>

[View more Flow references on thermofisher.com](#)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.