

# Phospho-Syk (Tyr348) Monoclonal Antibody (moch1ct), APC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Mouse
Published Species	Human, Mouse
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	moch1ct
Conjugate	APC
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573276

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	2 Publications

## Product Specific Information

Description: This moch1ct monoclonal antibody recognizes human and mouse spleen tyrosine kinase (also known as SYK) when phosphorylated on tyrosine 348 (Y348). SYK is the founding member of the SYK family of kinases that also includes ZAP-70 (zeta-associated protein of 70 kD) and is expressed in hematopoietic cells, including B lymphocytes, immature (CD4, CD8 double-negative and double-positive) thymocytes, and myeloid cells, epithelial cell lines, and normal breast tissue. SYK is critical for B cell receptor (BCR) signaling and B cell development. Autophosphorylation of at Y348 is necessary for SYK to become fully catalytically active and creates a docking site for the SH2 domains of Vav, Grb2, p85 subunit of PI3 kinase, and PLC gamma.

Specificity of this moch1ct clone was confirmed by ELISA, flow cytometry, and western blotting.

Applications Reported: This moch1ct antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

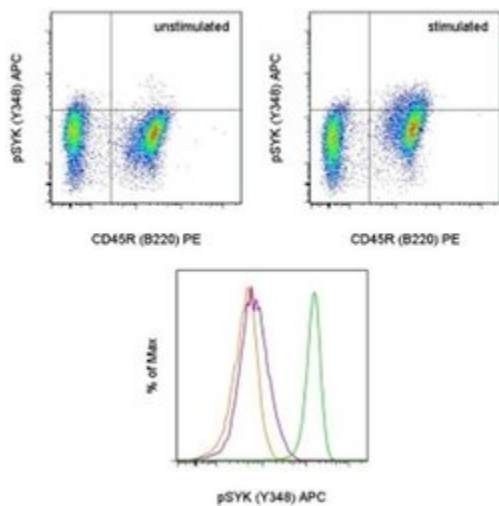
Applications Tested: This moch1ct antibody has been pre-titrated and tested by intracellular staining followed by flow cytometric analysis of stimulated mouse splenocytes. This can be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a 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: All protocols work well for this monoclonal antibody. Use of Protocol A: Two-step protocol: intracellular (cytoplasmic) proteins allows for the greatest flexibility for detection of surface and intracellular (cytoplasmic) proteins. Use of Protocol B: One-step protocol: intracellular (nuclear) proteins is recommended for staining of transcription factors in conjunction with surface and phosphorylated intracellular (cytoplasmic) proteins. Protocol C: Two-step protocol: Fixation/Methanol allows for the greatest discrimination of phospho-specific signaling between unstimulated and stimulated samples, but with limitations on the ability to stain specific surface proteins (refer to "Clone Performance Following Fixation/Permeabilization" located in the Best Protocols Section under the Resources tab online). 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-Syk (Tyr348) Monoclonal Antibody (moch1ct), APC, eBioscience™



### Phospho-Syk (Tyr348) Antibody (17-9014-42) in Flow

TOP: Intracellular staining of unstimulated (left) or 2-minute F (ab')<sub>2</sub> Anti-Mouse IgM, u chain specific Functional Grade Purified-stimulated (Product # 16-5092-85) (right) mouse spleen cells with Anti-Mouse CD45R (B220) PE (Product # 12-0452-82) and Anti-Human/Mouse phospho-SYK (Y348) APC using the Intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00) and protocol. BOTTOM: Intracellular staining of unstimulated (orange histogram), 2-minute F (ab')<sub>2</sub> Anti-Mouse IgM, u chain specific Functional Grade Purified-stimulated (Product # 16-5092-85) (purple histogram), or hydrogen peroxide-activated sodium pervanadate-treated mouse spleen cells (green histogram) with Anti-Human/Mouse phospho-SYK (Y348) APC. CD45R (B220)+ lymphocytes were used for analysis.

## Flow Cytometry (2)

Northern clinics of Istanbul

### IL-15 negatively regulates curdlan-induced IL-23 production by human monocyte-derived dendritic cells and subsequent Th17 response.

"17-9014 was used in Flow cytometry/Cell sorting to assess the effects of long- and short-term IL-15 cytokine exposure of human monocyte-derived curdlan-matured dendritic cells (DCs) on the production of Th17 cell-polarizing cytokine IL-23 and subsequent Th17 cell activation."

Authors: Eken A, Okus Z, Erdem S, Azizoglu ZB, Haliloglu Y, Bicer A, Gur TN, Yilmaz E, Karakukcu M, Altuntas HD, Canatan H

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2020

Scientific reports

### Secreted IgM deficiency leads to increased BCR signaling that results in abnormal splenic B cell development.

"17-9014 was used in Flow cytometry/Cell sorting to identify secreted IgM as negative regulators of BCR signalling and suggest that they can act as decoy receptors for self-antigens that are recognised by membrane bound BCRs."

Authors: Tsiantoulas D, Kiss M, Bartolini-Gritti B, Bergthaler A, Mallat Z, Jumaa H, Binder CJ

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2017

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