

# Phospho-Zap70 (Tyr319)/Syk (Tyr352) (A3) rabbit mAb

www.abwizbio.com

Support: info@abwizbio.com

Order: sales@abwizbio.com

## #2076

Store at: -20°C

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

Applications	Detection	Clonality	Isotype
Flow Cytometry	Anti-Rabbit IgG	Monoclonal	Rabbit IgGk

**Format:** Unconjugated

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

**Formulation:** 1X PBS, 0.02% NaN<sub>3</sub>, 50% Glycerol, 0.1% BSA

**Preparation:** Protein A+G

**Reactivity:** Human, Mouse

### Recommended

**Usage:** 1µg/mL ? 0.001µg/mL. 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 Tyr319/Tyr352 of human phospho Zap70/Syk.

**Description:** ZAP70 (Tyrosine-protein kinase ZAP-70, phospho Zap70) is a protein tyrosine kinase (PTK) that associates with the  $\zeta$  subunit of the T cell antigen receptor (TCR) and undergoes tyrosine phosphorylation following TCR stimulation. Following TCR engagement, Zap-70 is rapidly phosphorylated on several tyrosine residues through autophosphorylation and transphosphorylation by the Src family tyrosine kinase Lck. ZAP70 contains two SH2-like domains with the PTK domain located at the C-terminus. It appears that both phospho Zap70 and Syk are recruited to the phosphorylated CD3 and  $\zeta$  subunits after TCR stimulation. Phosphorylation of Tyr319 is required for the assembly of a phospho Zap70-containing signaling complex that leads to the activation of the PLC-gamma1-dependent and Ras-dependent signaling cascades in antigen-stimulated T cells. The orthologous Tyr352 residue in Syk is also involved in the association with PLC-gamma1.

### References:

1. Brdicka T et al., (2005) Mol Cell Biol 25:4924?4933.
2. Chan AC et al., (1992) Cell 71:649?662.
3. Cheng AM et al., (1997) Proc Natl Acad Sci94:9797?9801.
4. Deindl S et al., (2007) Cell 129:735?746.
5. Elder ME et al., (1994) Science 264:1596?1599.
6. Negishi I et al., (1995) Nature 376:435?438.
7. Yokosuka T et al., (2005) Nat Immunol 6:1253?1262.

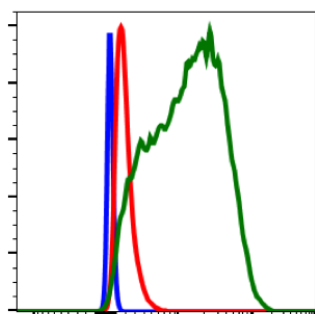
Events

ZapY319-A3 recognizes basal phosphorylation levels in mouse cells. Flow cytometric analysis of L929 cells secondary antibody only (blue) or 0.1 µg/mL of isotype control Cat. #2141 (orange) or of Phospho-Zap70 (Tyr319)/Syk (Tyr352) antibody ZapY319-A3 (green) Cat. #2076.

P

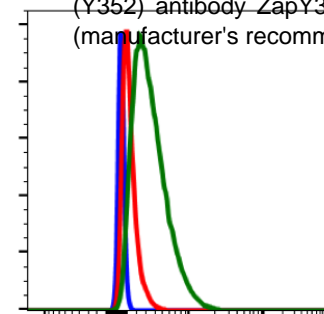
Flow cytometric analysis of Jurkat cells secondary antibody only negative control (blue) untreated (red) treated with pervanadate (green) treated + blocked with non-phospho-peptide (violet) or treated +blocked with phospho-peptide (brown) using Phospho-Zap70 (Tyr319)/Syk (Tyr352) antibody ZapY319-A3 (0.05 µg/mL) Cat. #2076.

Abwiz Cat. #2076  
0.01 µg/mL



Company C  
0.2 µg/mL  
(recommended conc.)

Flow cytometric analysis of Jurkat cells secondary antibody only negative control (blue) or untreated (red) or treated with H2O2 (green) using 0.01 µg/mL Phospho-Zap70 (Y319)/Syk (Y352) antibody ZapY319-A3 (Abwiz Cat. #2076) or Company C antibody at 0.2 µg/mL (manufacturer's recommended concentration).

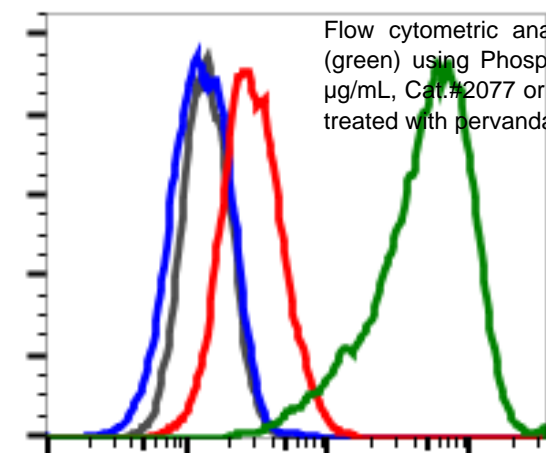


Phospho-Zap70 (Y319)/Syk (Y352)

Phospho-Zap70 (Y319)/Syk (Y352)

Events

Flow cytometric analysis of Jurkat cells, untreated (red) or treated with pervanadate (green) using Phospho-Zap70(Tyr319)/Syk (Tyr352) A3 antibody Zap70Y319-A3 at 0.01 µg/mL, Cat.#2077 or concentration matched isotope (KLH-G9) for untreated cells (gray) or treated with pervanadate (blue) Cat.#2141 #2436.



Phospho-Zap70(Y319)/Syk(Y352)