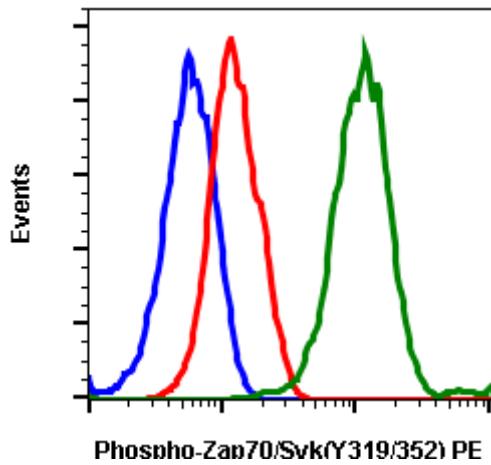


For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	Isotype
Flow Cytometry	N/A	Monoclonal	Rabbit IgGk

Format:	PE
Cross Reactivity:	Predicted to work with mouse, rat and other homologues.
Formulation:	1X PBS, 0.09% NaN ₃ , 0.2% BSA
Preparation:	Protein A+G
Reactivity:	Human, Mouse
Recommended Usage:	For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.
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 z 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 z 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:	<ol style="list-style-type: none"> 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 Sci 94:9797-9801. 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.



Flow cytometric analysis of Jurkat cells unstained untreated cells as negative control (blue) or stained and untreated (red) or stained and treated with pervanadate (green) using phospho-Zap70 (Tyr319)/Syk (Tyr352) antibody ZapY319-A3 PE conjugate Cat. #2077.