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Phospho-Zap-70 (Tyr319)/Syk (Tyr352) (65E4) Rabbit mAb (Alexa Fluor® 647 Conjugate)

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: FC-FP	Reactivity: H M	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #P43403, #P43405	Entrez-Gene Id: 7535, 6850
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Product Usage Information	Application Flow Cytometry (Fixed/Permeabilized)	Dilution 1:50
Storage	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.	
Specificity/Sensitivity	Phospho-Zap-70 (Tyr319)/Syk (Tyr352) (65E4) Rabbit mAb (Alexa Fluor® 647 Conjugate) detects endogenous levels of Zap-70 only when phosphorylated at Tyr319. It cross-reacts with endogenous levels of Syk when phosphorylated at Tyr352.	
Species predicted to react based on 100% sequence homology	Rat, Hamster, Chicken, Bovine, Dog, Pig, Horse	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr319 of human Zap-70.	
Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 647 fluorescent dye and tested in-house for direct flow cytometry analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-Zap-70 (Tyr319)/Syk (Tyr352) (65E4) Rabbit mAb #2717.	
Background	The Syk family protein tyrosine kinase Zap-70 is expressed in T and NK cells and plays a critical role in mediating T cell activation in response to T cell receptor (TCR) engagement (1). Following TCR engagement, Zap-70 is rapidly phosphorylated on several tyrosine residues through autophosphorylation and transphosphorylation by the Src family tyrosine kinase Lck (2-6). Tyrosine phosphorylation correlates with increased Zap-70 kinase activity and downstream signaling events. Expression of Zap-70 is correlated with disease progression and survival in patients with chronic lymphocytic leukemia (7,8).	
Background References	<ol style="list-style-type: none"> 1. Chu, D.H. et al. (1998) <i>Immunol Rev</i> 165, 167-80. 2. Iwashima, M. et al. (1994) <i>Science</i> 263, 1136-9. 3. Neumeister, E.N. et al. (1995) <i>Mol Cell Biol</i> 15, 3171-8. 4. Chan, A.C. et al. (1995) <i>EMBO J</i> 14, 2499-508. 5. Williams, B.L. et al. (1999) <i>EMBO J</i> 18, 1832-44. 6. Di Bartolo, V. et al. (1999) <i>J Biol Chem</i> 274, 6285-94. 7. Wiestner, A. et al. (2003) <i>Blood</i> 101, 4944-51. 8. Crespo, M. et al. (2003) <i>N Engl J Med</i> 348, 1764-75. 	

Species Reactivity Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key **H:** Human **M:** Mouse

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