

Anti-phospho-ZAP70 (Tyr319)

Rabbit Polyclonal Antibody

Catalog # Z02-65R

Lot # Z2014-39

Cited Applications

WB

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the ZAP70 protein phosphorylated at tyrosine 319

Cross Reactivity

Human, Mouse and Rat

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

The antiserum was produced against synthesized phosphopeptide derived from human ZAP-70 around the phosphorylation site of tyrosine 319 (S-P-YP-S-D).

Formulation

Phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Stability

1yr at -20°C from date of shipment

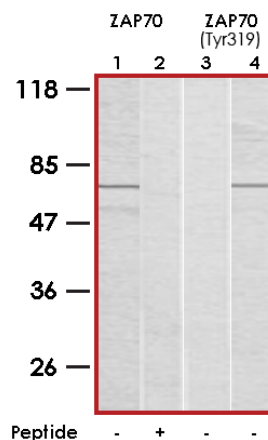
Scientific Background

ZAP70 is a non-receptor protein tyrosine kinase (part of the Syk/Zap70 family) that is involved in signaling by the T-cell antigen receptor (TCR). Ligation of the TCR/CD3 receptor in Jurkat T-cells induces phosphoprotein complexes which contain ZAP70 (1). TCR zeta chains are initially phosphorylated by p56Lck that lead to the recruitment of ZAP70 via its SH2 domain. ZAP70 in turn phosphorylates other proteins in the TCR-phosphoprotein complex. One of the natural substrates for ZAP70 is the zeta-chain dimer of the TCR/CD3 complex (2).

References

1. Duplay, P. et al: p56lck interacts via its src homology 2 domain with the ZAP-70 kinase. *J Exp Med.* 1994 Apr 1;179(4):1163-72.
2. Chan, A C. et al: Differential expression of ZAP-70 and Syk protein tyrosine kinases, and the role of this family of protein tyrosine kinases in TCR signaling. *J Immunol.* 1994 May 15;152(10):4758-66.
3. Salomon AR, et al. (2003) *Proc Natl Acad Sci U S A*; 100(2): 443-448
4. Ku GM, et al. (2001) *EMBO J*; 20(3): 457-465.
5. Tang J, et al. (1999) *Proc Natl Acad Sci U S A*; 96(17): 9775-9780.
6. Zhao Q, et al. (1996) *Mol Cell Biol*; 16(12): 6765-6774.
7. Williams BL, et al. (1999) *EMBO J*; 18(7): 1832-1844.

Sample Data



Western blot analysis of extract from Jurkat cells using ZAP70 antibody (Lane 1 and 2) and Anti-phospho-ZAP70 (Tyr319) (Lane 3 and 4).

Anti-phospho-ZAP70 (Tyr319)

Rabbit Polyclonal Antibody

Catalog # **Z02-65R**

Lot # **Z2014-39**

Purification **Affinity chromatography**

Stability **1yr at -20°C from date of shipment**

Storage & Shipping **Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.**

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com

FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.