

ZAP-70 (LR): sc-4064 WB

BACKGROUND

The Src-related protein tyrosine kinases Lck p56 and Fyn p59 are critically involved in T cell antigen receptor (TCR)/CD3-triggered activation. T lymphocytes also express a second class of non-receptor protein tyrosine kinases, Syk p70 and ZAP p72. These kinases resemble the Src family protein tyrosine kinases in that they have a C-terminal catalytic domain, but differ in that they are characterized by two SH2 domains but no SH3 domains. Evidence for the involvement of the Syk/ZAP family proteins in T cell activation was suggested by the finding that Syk p72 kinase fused to the transmembrane and extracellular domains of CD7 and DC16, respectively, can induce complete T cell activation. In contrast, the ZAP p70 kinase was insufficient unless it was coaggregated with a Fyn p59-containing chimera, suggesting that regulation of ZAP p70 activity may require a functional interaction with Src family kinases.

REFERENCES

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SOURCE

ZAP-70 (LR) is expressed in *E. coli* as an 18 kDa polyhistidine tagged fusion protein corresponding to the "linker" domain (amino acids 253-304) of ZAP-70 of human origin.

PRODUCT

ZAP-70 (LR) is purified from bacterial lysates (>98%) by Ni⁺⁺ affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

ZAP-70 (LR) is suitable as a Western blotting control for sc-574.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.