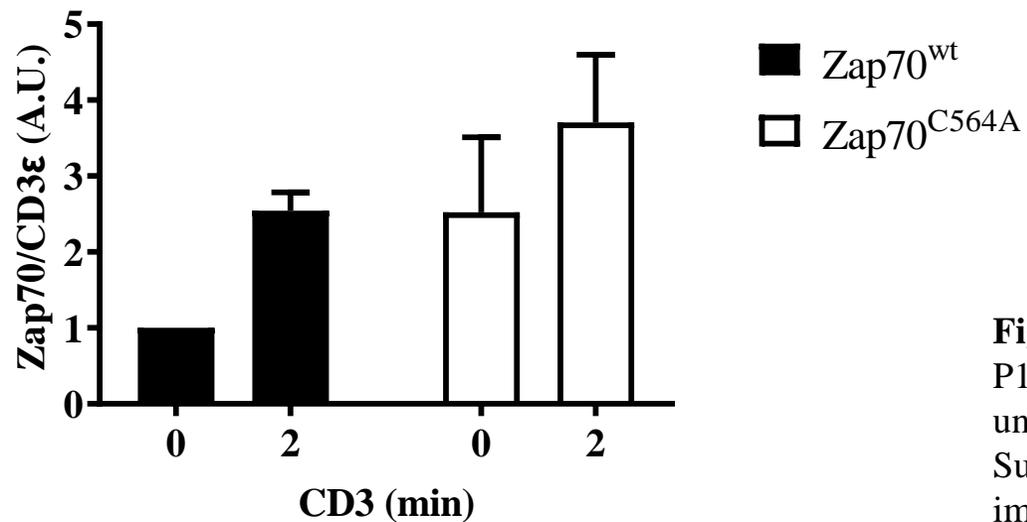


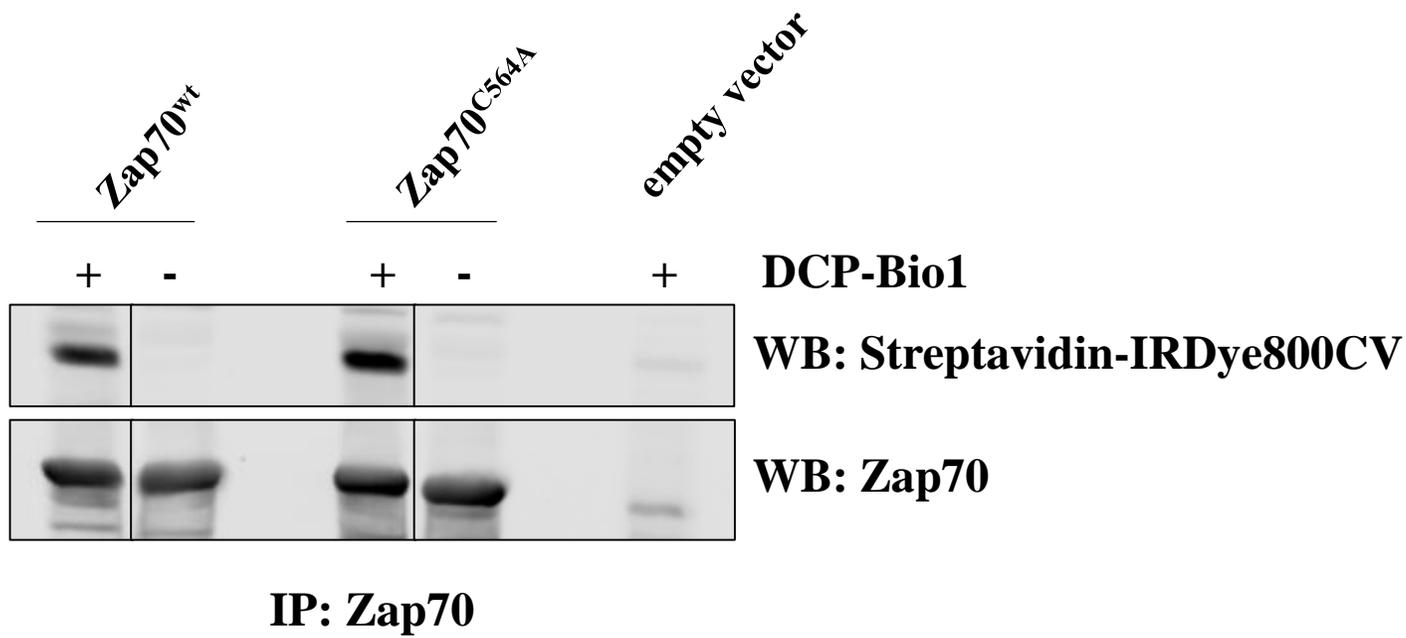
**Figure S1. Analysis of TCR signaling in cells expressing C564A and C564R Zap70 mutants.**

P116 cells were transiently transfected with the indicated plasmids. Subsequently, cells were stimulated with UCHT1 for 2 min, lysed and the phosphorylation of the indicated molecules was analyzed using phospho-specific antibodies. Equal protein loading was assessed using antibodies directed against  $\beta$ -actin. One representative experiment is shown (n=3).



**Figure S2. Recruitment of Zap70 to the  $\zeta$ -chain.**

P116 cells stably expressing Zap70<sup>wt</sup> or Zap70<sup>C564A</sup> were either left untreated or stimulated with an anti-CD3 antibody (UCHT1). Subsequently, cells were lysed and the  $\zeta$ -chain was immunoprecipitated. Zap70 immunoblots were performed to evaluate the association between Zap70 and the TCR. The efficiency of the immunoprecipitation was evaluated by performing anti-CD3 $\epsilon$  immunoblots. The Zap70 signal was normalized to that of CD3 $\epsilon$ . Values were further normalized by setting to one the Zap70/CD3 $\epsilon$  ratio from unstimulated cells expressing Zap70<sup>wt</sup>. The graph shows analyses of the association between Zap70 and the  $\zeta$ -chain expressed as arbitrary units  $\pm$  SEM of four independent experiments. Statistical analyses performed using the Welch's *t* test revealed no significant difference between unstimulated cells expressing Zap70<sup>wt</sup> or Zap70<sup>C564A</sup> and also no significant difference between CD3-stimulated cells expressing Zap70<sup>wt</sup> or Zap70<sup>C564A</sup>.



**Figure S3. Analysis of Zap70 sulfenylation.**

P116 cells stably expressing Zap70<sup>wt</sup>, Zap70<sup>C564A</sup>, or no Zap70 (empty vector) were either left untreated or incubated with DCP-Bio1 as previously described [16]. Subsequently, cells were lysed and Zap70 was immunoprecipitated. The sulfenylation levels were detected using Streptavidin-IRDye800CV. Zap70 immunoblot was performed to show equal loading. One representative experiment is shown (n=3).