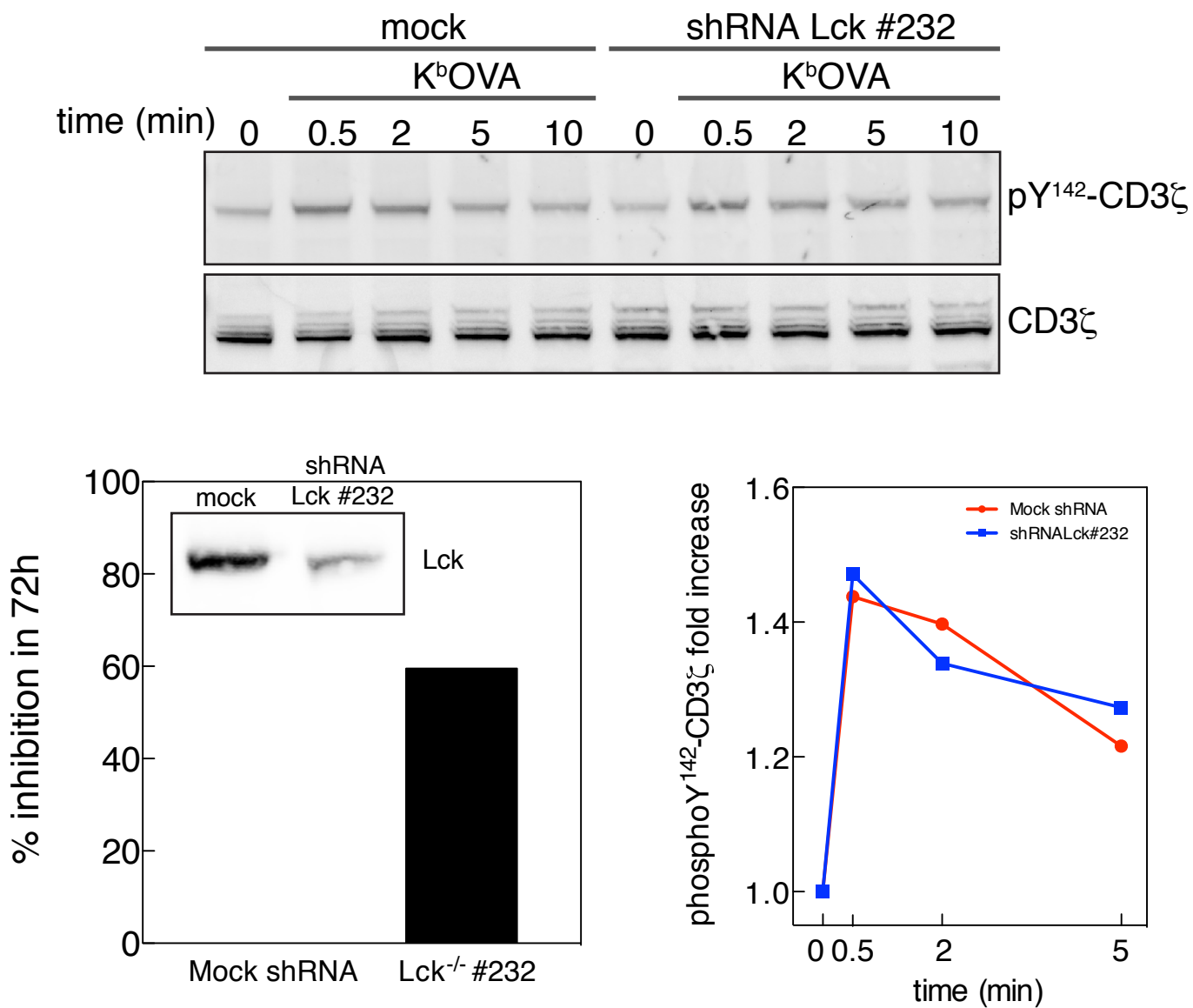


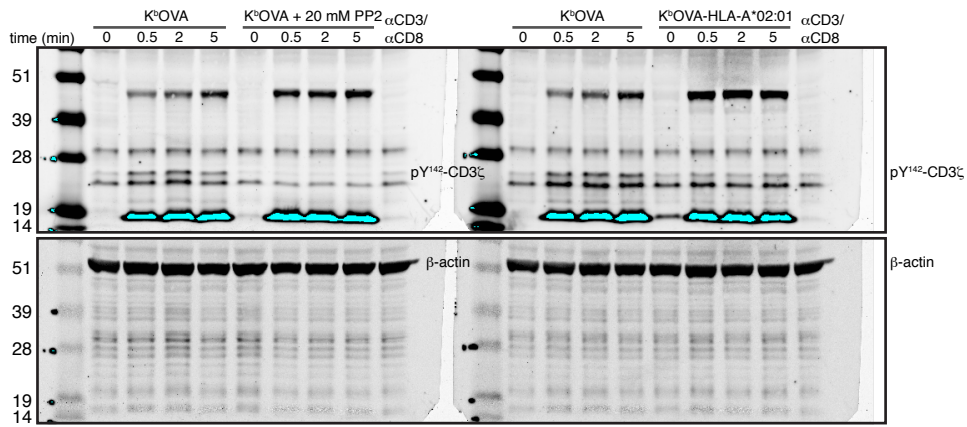
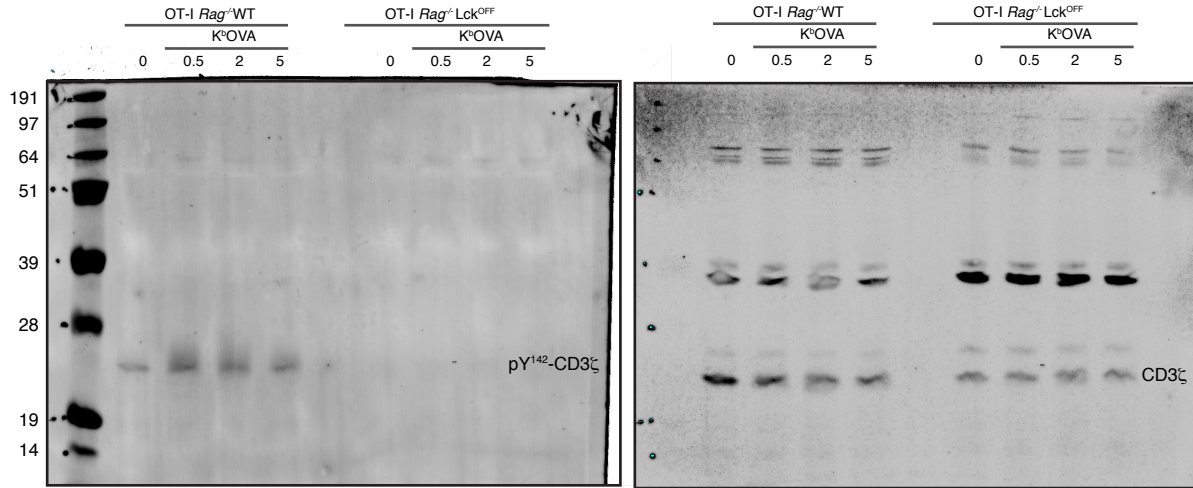
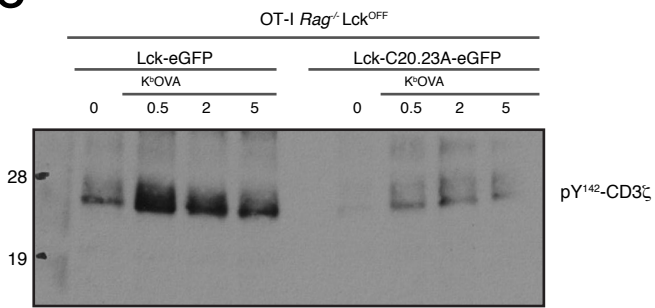
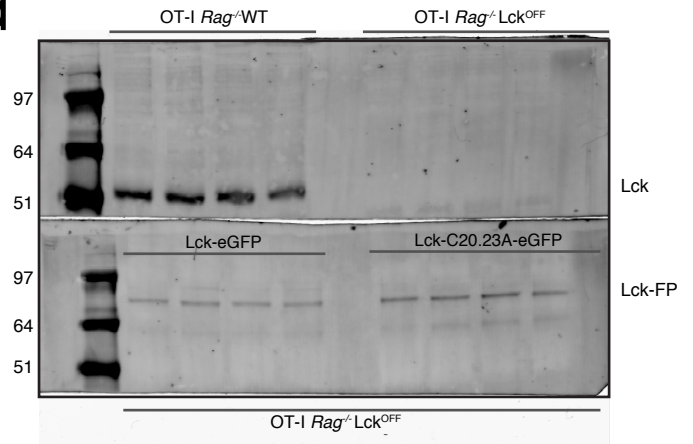
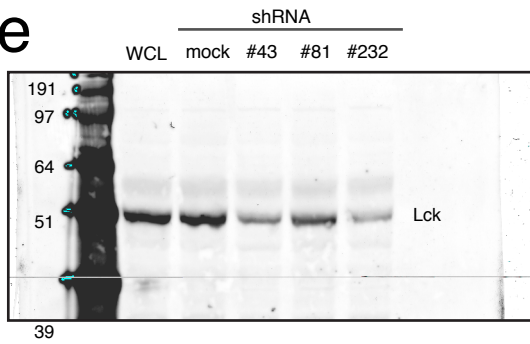
Supplementary Fig 1. Function of artificial lipid bilayers

(a) Fluorescence recovery of a photobleached area on the DOPC 0.2mol% Biotinyl-CAP-PE and 0.2mol% DGS-NTA (Ni) bilayer. Scale bar 10 μm . **(b)** Relocation of fluorescent streptavidin after addition of OT-I hybridoma expressing CD8 α and CD8 β on bilayers containing H2-Kb-OVA plus ICAM-1. Scale bar 10 μm . **(c)** Ca^{2+} flux from OT-I CD8 $\alpha\beta$ -expressing T hybridoma on bilayers containing either H2-Kb-OVA (circles) or H2-Kb-VSV (triangles) monomers plus ICAM-1, or just ICAM-1 (squares). Mean of more than 25 cells per condition is represented. **(d)** Total phospho-Tyr levels from OT-I CD8 α and CD8 β expressing T cell hybridoma on bilayers containing either H2-Kb-OVA or H2-Kb-VSV monomers plus ICAM-1, or ICAM-1 alone after 15 min of interaction. Scale bar 5 μm . Unpaired t test. *** $p < 0.0001$.



Supplementary Fig 2. Lck knockdown by shRNA does not affect TCR phosphorylation

OT-I CTL were transduced with shRNA plasmid against Lck and then stimulated with H2-Kb-OVA tetramers for the indicated times, CD3ζ phosphorylation was analyzed by immunoblot. Quantitation of band intensities is shown in the bottom right plot. In the left plot inhibition efficiency after 72h of Lck shRNA expression is shown.

a**b****c****d****e**

Supplementary Fig. 3. Full Size Immunoblots. Corresponding full size western blots from Fig.6. **(a)** from 7a **(b)**, 7b **(c and d)** and effect of different sequences of Lck shRNA used in the experiment **(e)**.