

## 12-4137: Phospho-Lck (Tyr505) (Clone: A3) rabbit mAb

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | LckY505-A3   |
| <b>Application :</b>           | FACS, WB   |
| <b>Reactivity :</b>            | Human  |
| <b>Conjugate :</b>             | Unconjugated   |
| <b>Format :</b>                | Purified   |
| <b>Alternative Name :</b>      | Tyrosine-protein kinase Lck, Leukocyte C-terminal Src kinase, LSK, Protein YT16, T cell-specific protein-tyrosine kinase |
| <b>Isotype :</b>               | Rabbit IgG1k   |
| <b>Immunogen Information :</b> | A synthetic phospho-peptide corresponding to residues surrounding Tyr505 of human phospho Lck                            |

### Description

Lck is a member of the Src family of non-receptor tyrosine kinases and plays a major role in T cell activation. Lck activates many downstream signaling pathways including Akt/mTOR, SAPK/JNK, PLCg1, and RAS/MAPK. Phosphorylation of Lck at Tyr394 in the catalytic domain at the ATP-binding site stabilizes the open and active form, while phosphorylation at Tyr505 in the C-terminal domain promotes the closed, inactive conformation. Multiple small-molecule drugs used to treat leukemia have been shown to target inhibition of Lck, including imatinib and dasatinib. Lck is thus a promising target for suppressing T-cell responses for the treatment of inflammatory diseases or after organ transplantation.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µl / 200 µl  |
| <b>Content :</b>           | 1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA |
| <b>Storage condition :</b> | Store at -20°C. Avoid repeated freeze and thaw cycles.  |

### Application Note

1 µg/mL - 0.001 µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

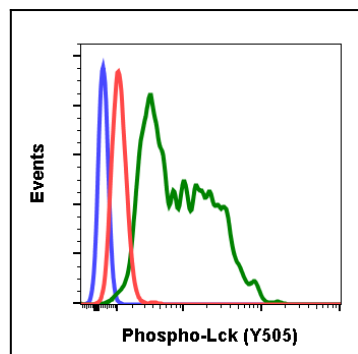


Fig-1: Flow cytometric analysis of Daudi cells secondary antibody only negative control (blue) or untreated (red) or treated with IFN $\alpha$  + IL-4 + pervanadate (green) using Phospho-Lck (Tyr505) antibody LckY505-A3 at 1 µg/mL. .

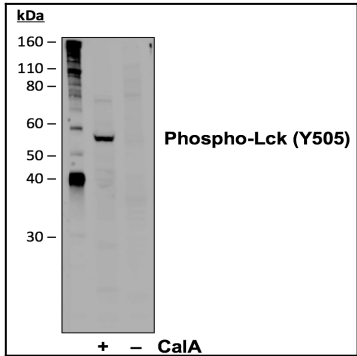


Fig 2 : Western blot analysis of Jurkat cell extract untreated or treated with 200nM calyculin A for 30min using Phospho-Lck (Tyr505) antibody LckY505-A3 at 0.1 µg/mL.

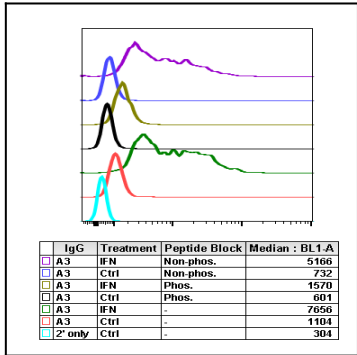


Fig-3: Peptide blocking flow cytometric analysis of Daudi cells secondary antibody only negative control (light blue) or untreated (red) or treated with IFNα + IL-4 + pervanadate (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-Lck (Tyr505) antibody LckY505-A3 at 1 µg/mL.

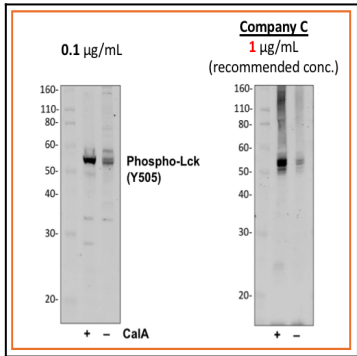


Fig-4: Western blot analysis of Jurkat cell extract, untreated or treated with calyculin A using 0.1 µg/mL Phospho-Lck (Tyr505) antibody LckY505-A3 or Company C antibody at 1 µg/mL (manufacturer's recommended concentration) developed using the same exposure.