Mechanisms of TCR phosphorylation by LCK

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T-cell activation is essential for a specific immune response. However, many steps of the underlying signaling cascades are poorly understood so far. The main question is the molecular mechanism that causes TCR phosphorylation by the kinase LCK upon antigen binding to the TCR.

Our main focus is therefore to understand the molecular interaction between the TCR and LCK and how this interaction is influenced by the surrounding lipid environment.