

## Abstract

LCK activity is crucial for the triggering of the entire T cell activation process. The primary function of LCK is to convert the signal of TCR:pMHC ligation into the intracellular environment. The outcome of the LCK-triggered pathway is T cell activation, cytokine production, differentiation, and clonal expansion. This thesis provides a summary of recent knowledge about the unique position of LCK in the T cell signaling machinery as well as an overview of molecules and interacting partners that regulate LCK activity. It describes the importance of the LCK-coreceptor association for optimal TCR signaling and physiological thymocyte development and mentions discussed adaptor role of LCK in the T cells.

**Keywords:** LCK, T-cell, antigen, kinase, enzyme