

CaMKII influences the antigen-induced proliferation of T cells
Irene L. Ch'en, Sebastian Calbo and Steven M. Hedrick

Division of Biology, University of California, San Diego, CA 92093-0687

The calcium/calmodulin kinase II family is composed of four isoforms, each controlling cellular response upon induction of calcium. Activation of CaMKII can occur through the binding of calcium-calmodulin following calcium influx. Previously, we generated mice expressing a calcium-independent form of the kinase (CaMKII β) and found an increase of memory T cells and a greater proliferative response of CD4 T cells to antigen. In contrast, the antigen-induced proliferation of CD8 T cells from CaMKII β TCR transgenic mice is lesser in magnitude yet responds to lower doses of antigen compared to WT mice.