

Abstract Title: Assessment of the impact of genes that inhibited antigen-presentation to CD8⁺ T-cells on the course of MCMV infection

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MCMV contains three genes, m4, m6 and m152 that inhibited antigen processing and presentation to CD8⁺ cytotoxic T cells. To investigate how important these genes are for virus survival in the host, we infected C57BL/6 mice with wild type MCMV or a mutant lacking m4, m6 and m152 (TKO: triple knockout) during acute infection. Virus titers in lungs, liver and kidneys and the kinetics of virus clearance were similar for both viruses. Mice infected with each virus for 6 weeks were immunosuppressed and viable virus was recovered from each mouse. PCR analysis confirmed that the virus recovered from TKO-infected mice was TKO virus. Thus, the ability to evade CD8⁺ T cell recognition had little effect on the course of acute MCMV infection and was not necessary for establishment of virus latency.