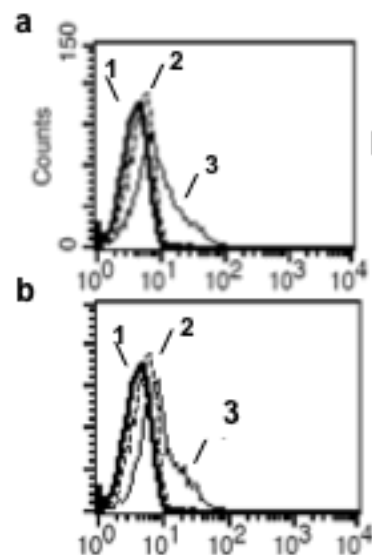


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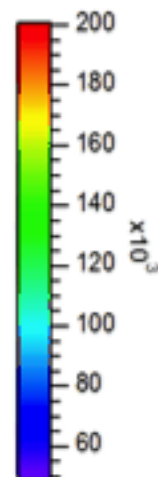
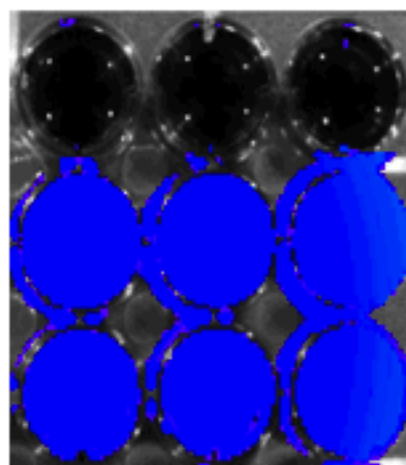
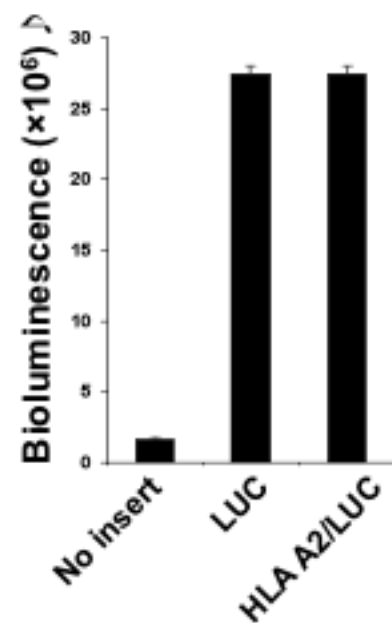
A

HLA A2/LUC

HLA A2

B

No insert
LUC
HLA A2/LUC

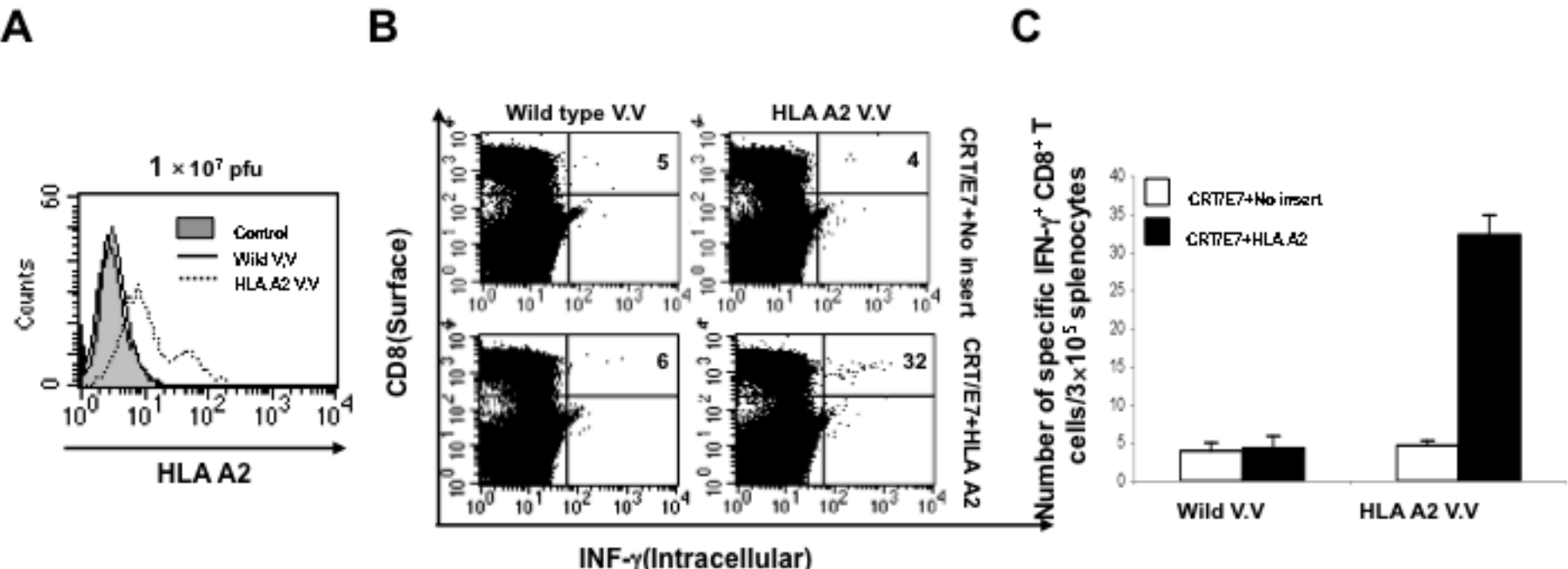
**C**

Supplementary Figure 1. Characterization of HLA-A2 or Luc expression in cells transfected with pcDNA3-HLA-A2/Luc plasmid. BHK-21 cells (4×10^4 per well) were transfected with pcDNA3-HLA-A2, pcDNA3-HLA-A2/Luc, pcDNA3-Luc or pcDNA3-No insert plasmid DNA. **(A)** Flow cytometry analysis to demonstrate expression of HLA-A2 in transfected cells. One day after transfection, transfected cells were analyzed by flow cytometry using HLA-A2 specific antibody. Bold line (1) represents untransfected cells, scattered line (2) represents pcDNA3-HLA-A2 or pcDNA3-HLA-A2/Luc transfected cells, and line (3) represents pcDNA3-No insert transfected cells. The data presented is a representation of two independent experiments. **(B)** Representative luminescence imaging depicting the luciferase expression level from pcDNA3-HLA-A2/Luc, pcDNA3-Luc or pcDNA3-No insert plasmid DNA transfected cells. **(C)** Bar graph depicting the quantification of luminescence intensity in each transfected cells. The data presented is a representation of two independent experiments.

Type of file: figure

Label: 9

Filename: figure_9.tif



Supplementary Figure 2. Intracellular cytokine staining followed by flow cytometry analysis to characterize the HLA-A2-specific CD8⁺ T cell immune response in vaccinated mice. C57BL/6 mice (5 per group) were immunized with CRT/E7 DNA mixed with no insert or HLA-A2 DNA. One week after the last vaccination, splenocytes from vaccinated mice were harvested. 1 × 10⁷ pfu of wild type (wild type VV) or HLA-A2 expressed vaccinia virus (HLA-A2 VV) were infected into 1 × 10⁶ DC-1 cells. One day later, these cells were incubated with splenocytes from vaccinated mice for 16 hours. Cells were characterized for HLA-A2-specific CD8⁺ T cells using intracellular IFN-γ staining followed by flow cytometry analysis. **(A)** Flow cytometry analysis to characterize HLA-A2 expression on DC-1 cells infected with wild type VV or HLA-A2 VV. PE-conjugated HLA-A2 antibody was used to detect HLA-A2 expression. The isotype antibody was used as the negative control (grey profile). **(B)** Representative data of intracellular cytokine staining followed by flow cytometry analysis showing the number of HLA-A2-specific IFNγ⁺ CD8⁺ T cells in the various groups (right upper quadrant). **(C)** Bar graph depicting the numbers of HLA-A2-specific IFN-γ-secreting CD8⁺ T cells per 3 × 10⁵ pooled splenocytes (mean ± s.d.).