



Supplemental Figure 3: Recognition of peptide and target cells expressing HLA-A2.1 and CEA by CD8⁺ and CD4⁺ T cells transfected with RNAs encoding CEA:691-699 reactive TCR α chains and β chains. RNAs encoding wild type (WT) and codon optimized (CO) TCR α and β chains were used to electroporate human CD8⁺ (A and C) and CD4⁺ (B and D) T cells previously stimulated to proliferate with anti-CD3 and IL-2. Two to four hours later, T cells were cocultured with various target cells. Approximately 20 hours later, IFN γ secretion was measured in response to CEA:691-699 peptide-pulsed T2 cells (A and B) and HLA-A2.1+ CEA+ tumor cells or genetically engineered COS cells (C and D).