



**Additional file 9:** Cytokine and cytotoxic molecule production from TCR-transduced T cells. Whole PBMC, CD4<sup>+</sup> or CD8<sup>+</sup> T cells that were transduced with 19305DP-TCR or CD8SP-TCR gene were cocultured with A375 and the culture supernatant was harvested at day 1 - day 4. TNF- $\alpha$ , IL-2, granzyme B (Gzm B) and perforin levels in the culture supernatant were measured by ELISA.