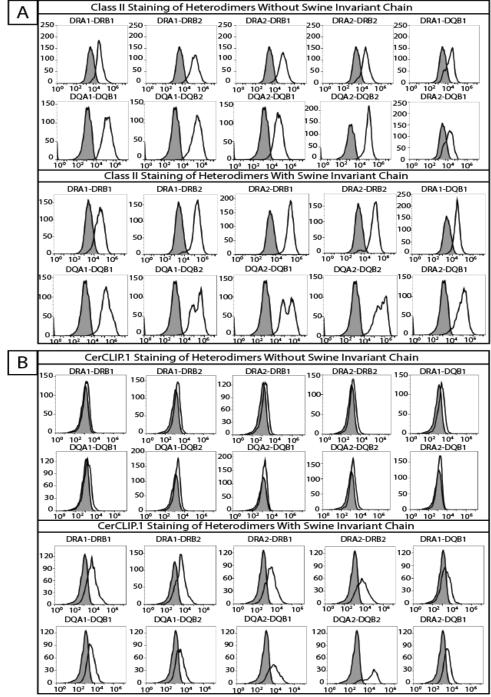
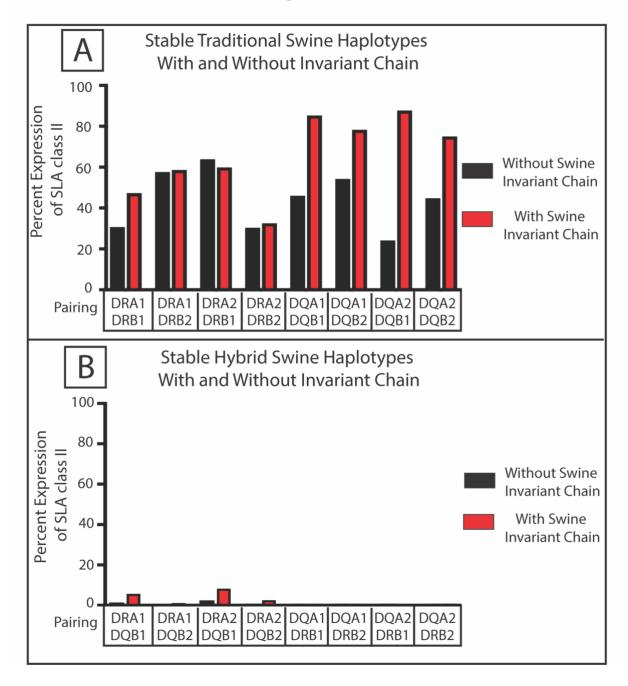
## Supplementary Figure 1



Supplementary Figure 1: Post-flow cytometry sorting phenotype of class II SLA single antigen cells. Cells were stained with antibodies specific for **A)** SLA-DR or -DQ or **B)** CerClip.1 to validate cell surface expression of the indicated  $\alpha$ - $\beta$  pairs (white histograms). Grey histograms represent negative control staining of the parent HEK293 cell devoid of  $\beta$ 2-microglobulin and class II SLA.

## Supplementary Figure 2



Supplementary Figure 2: Antibiotic selection stable expression of SLA class II in HEK 293T cells transfected with sixteen different SLA class II alpha-beta plasmid combinations, with (red) or without (black) dual transfection of the swine invariant chain. The traditional cis- and trans-haplotype pairing are shown in A and the hybrid haplotype pairings are shown in B.