Mechanisms underlying the lack of endogenous processing and CLIP-mediated binding of the invariant chain by HLA-DP^{84Gly}

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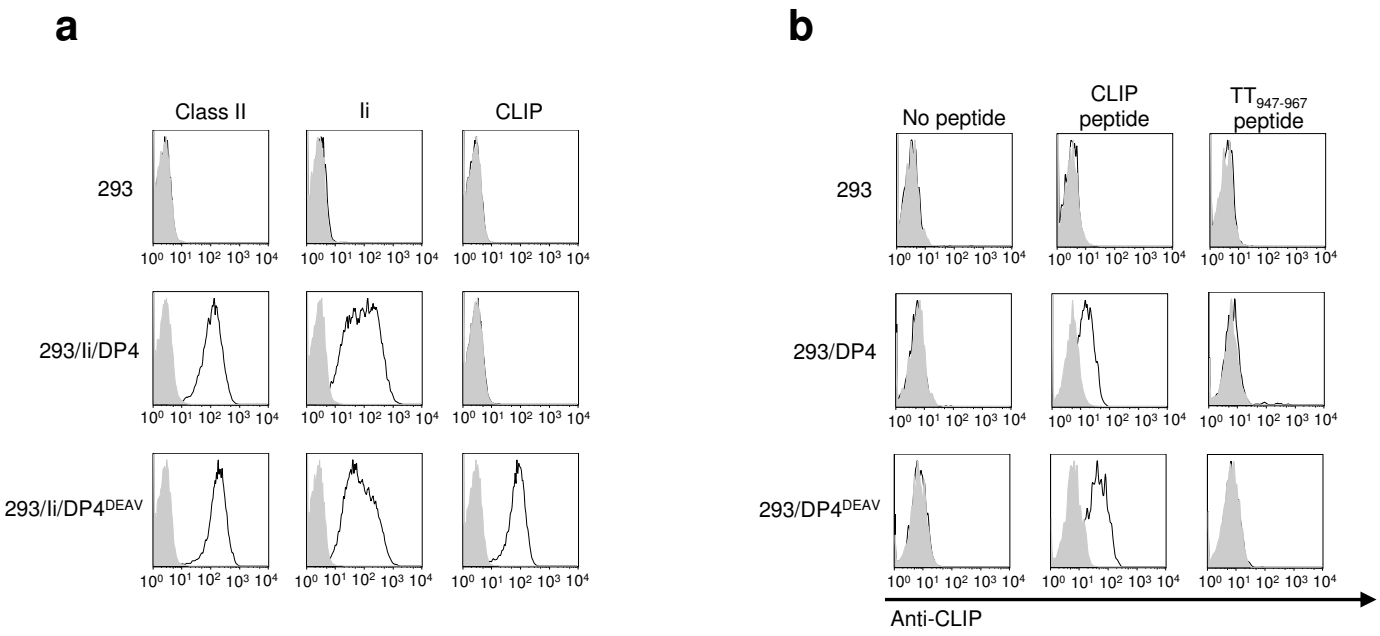
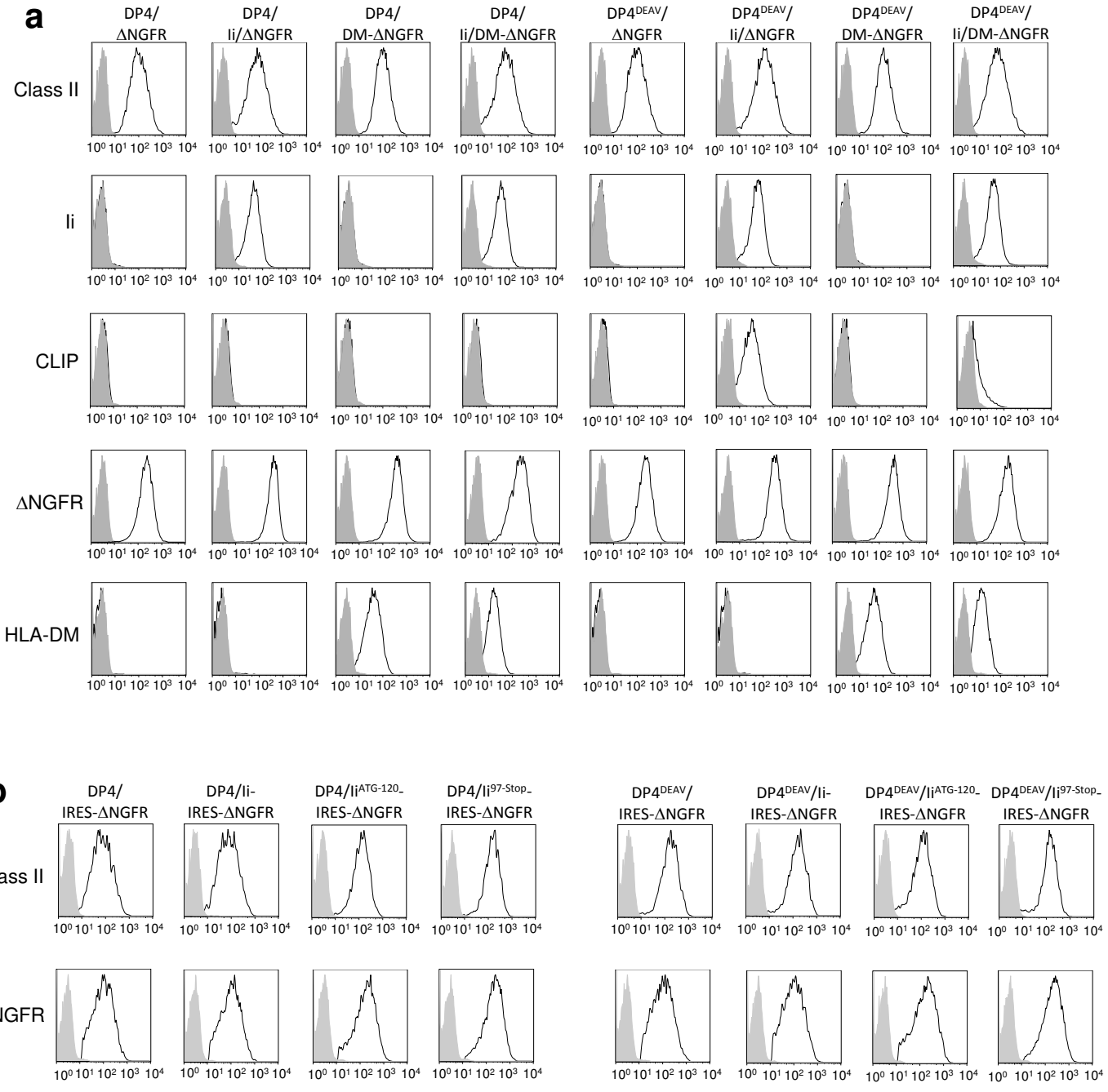
Supplementary Figure 1



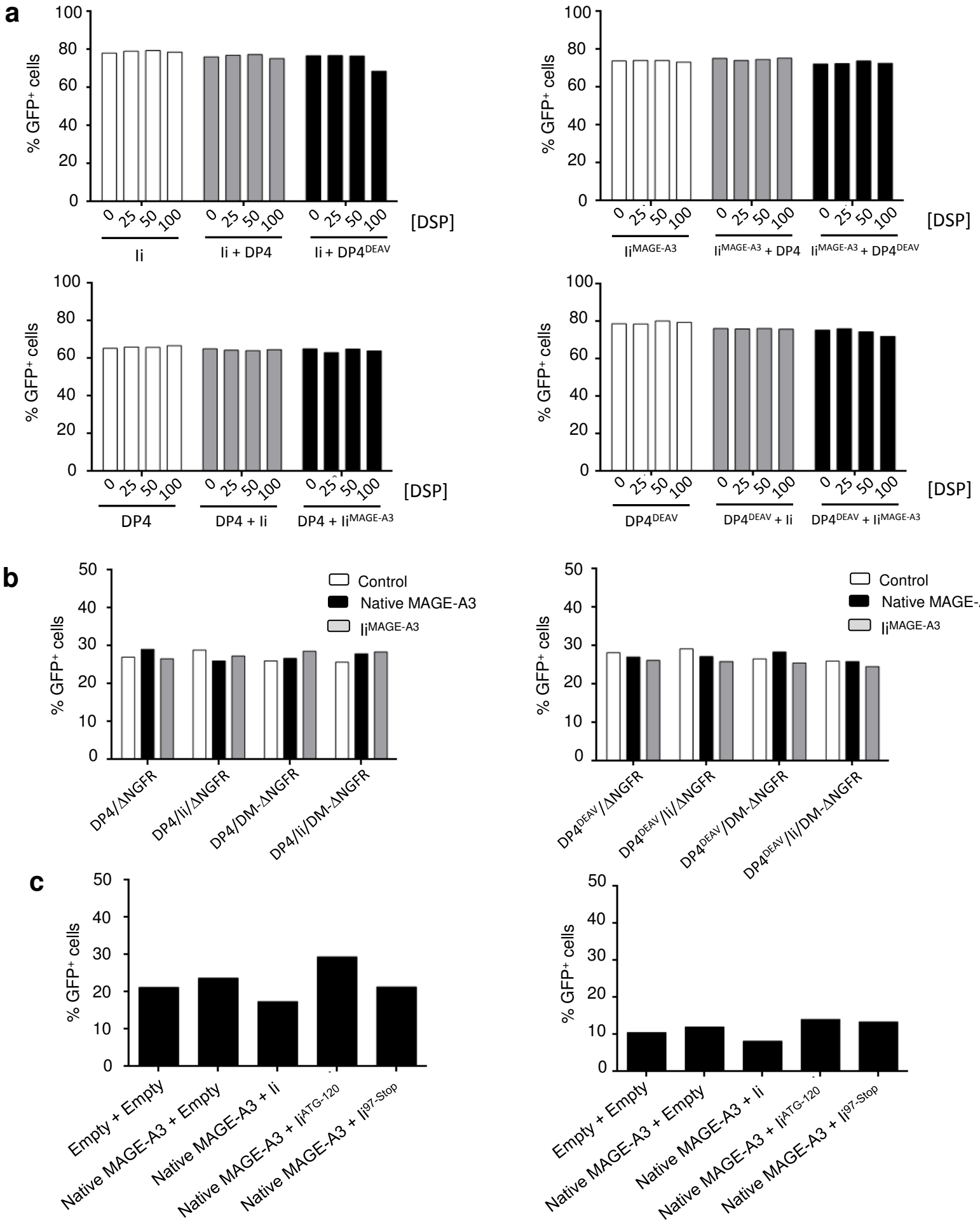
Supplementary Figure 1: CLIP derived from endogenous Ii is presented by HLA-DP4^{84DEAV87}, but not DP4, yet can associate with both DP4 and DP4^{84DEAV87}-expressing HEK293 cells when exogenously pulsed to the cell surface as a synthetic peptide. (**a**) Surface class II and CLIP expression, along with intracellular Ii expression, were analyzed on HEK293 transfectants by flow cytometry following staining with specific mAbs. HEK293 cells were retrovirally transduced with *DPA1*01:03* (DPA1) and either wild-type or mutated *DPB1*0401* (DPB4) with substitution mutations of the 84-87 region of the DPβ chain made as indicated. (**b**) Parental HEK293 or HEK293 cells stably expressing DP4 or DP4^{84DEAV87} were pulsed with 100 μM of CLIP, $TT_{947-967}$, or an equivalent volume of DMSO for 18 hrs. Surface CLIP expression was then analyzed by flow cytometry on the indicated HEK293 transfected cells following staining with CLIP-specific mAb.

Supplementary Figure 2



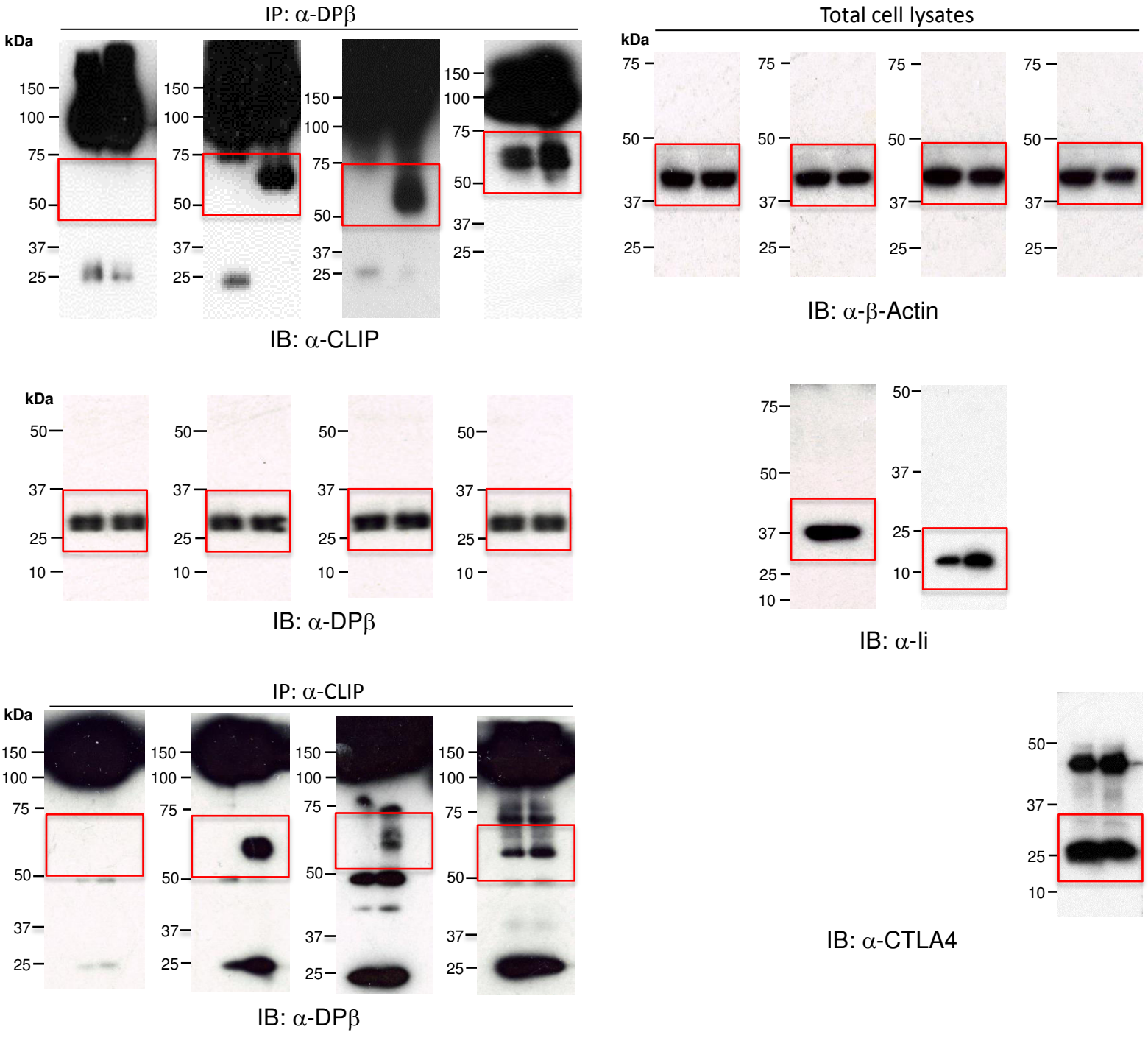
Supplementary Figure 2: Expression data for cells used in T cell activation (**Fig. 4**) (**a**) and flow cytometry experiments **(Fig. 5d**) **(b**)**.** Surface class II, CLIP and ΔNGFR expression, along with intracellular Ii and HLA-DM expression as indicated, were analyzed on the indicated K562 transfectants by flow cytometry following staining with specific mAbs. K562 cells were retrovirally transduced with *DPA1*01:03* (DPA1) and either wild type or mutated *DPB1*0401* (DPB4) with substitution mutations of the 84-87 region of the DPβ chain made as indicated to generate DP4 or DP4^{84DEAV87} respectively.

Supplementary Figure 3



Supplementary Figure 3: Transfection efficiencies for cross-linked cells lysed in Figure 3b and 3c (**a**), as well as for stimulator cells used in ELISPOT analysis in Figure 4 (**b**) and Figure 6 (**c**). Transduction efficiencies are measured by GFP expression in cells by flow cytometry.

Supplementary Figure 4



Supplementary Figure 4: Uncropped western blotting images from Figure 5c**.** Outlined regions represent portion of each image displayed in the main figures.