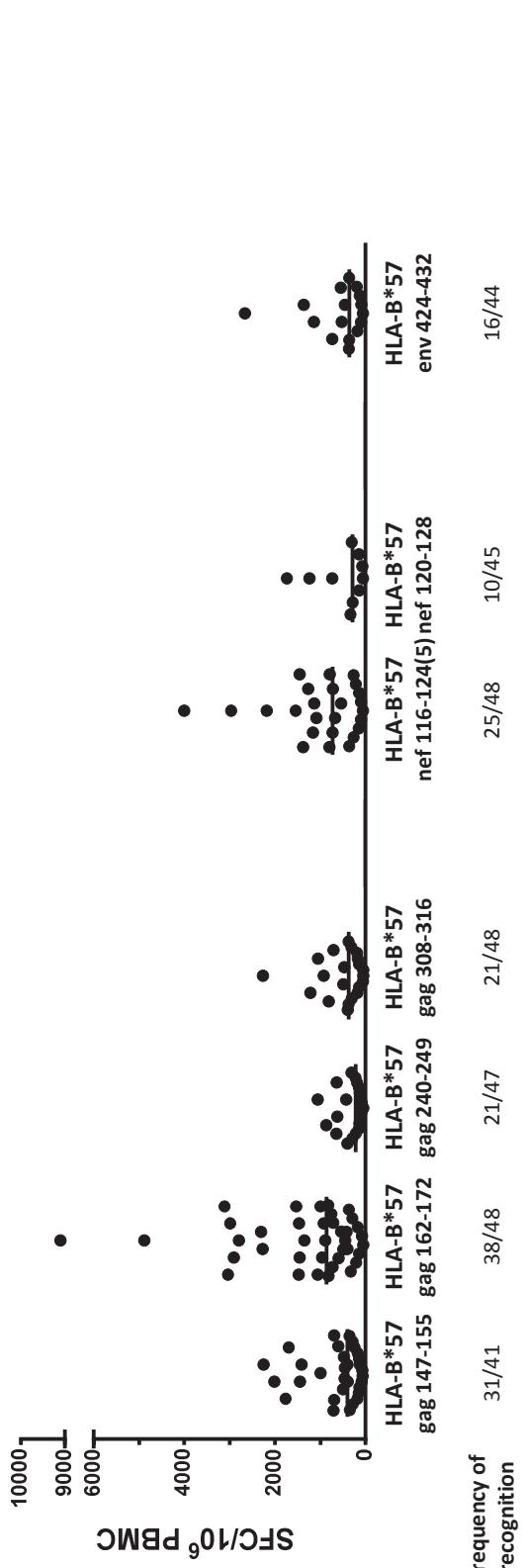
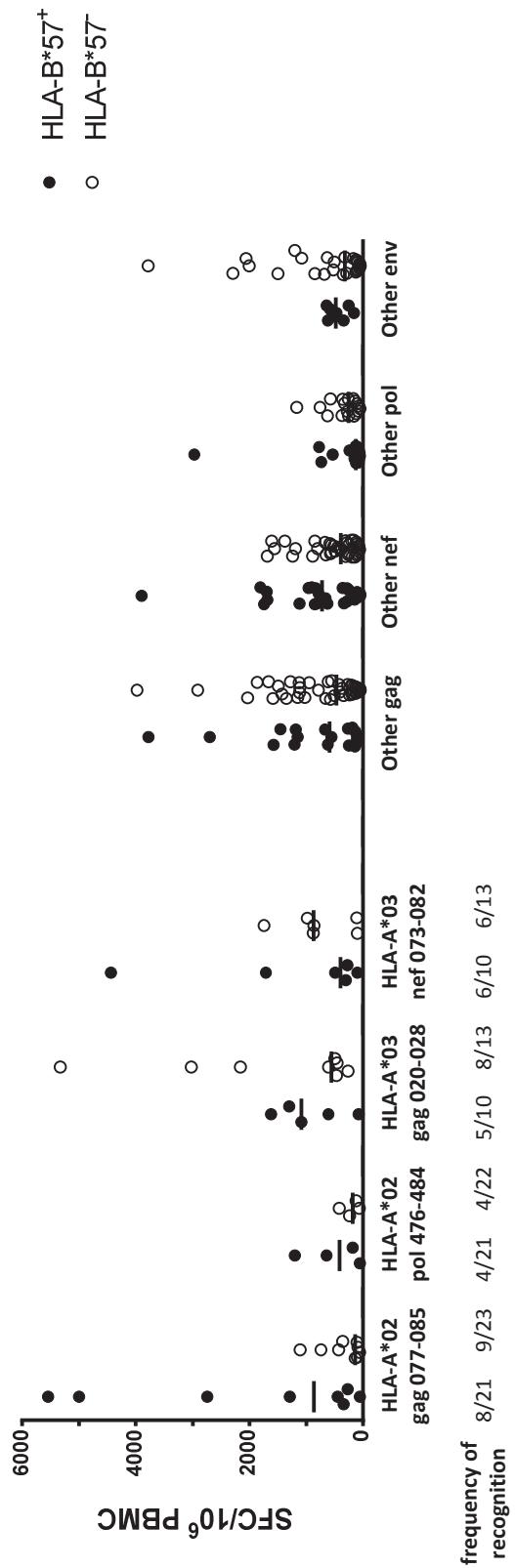
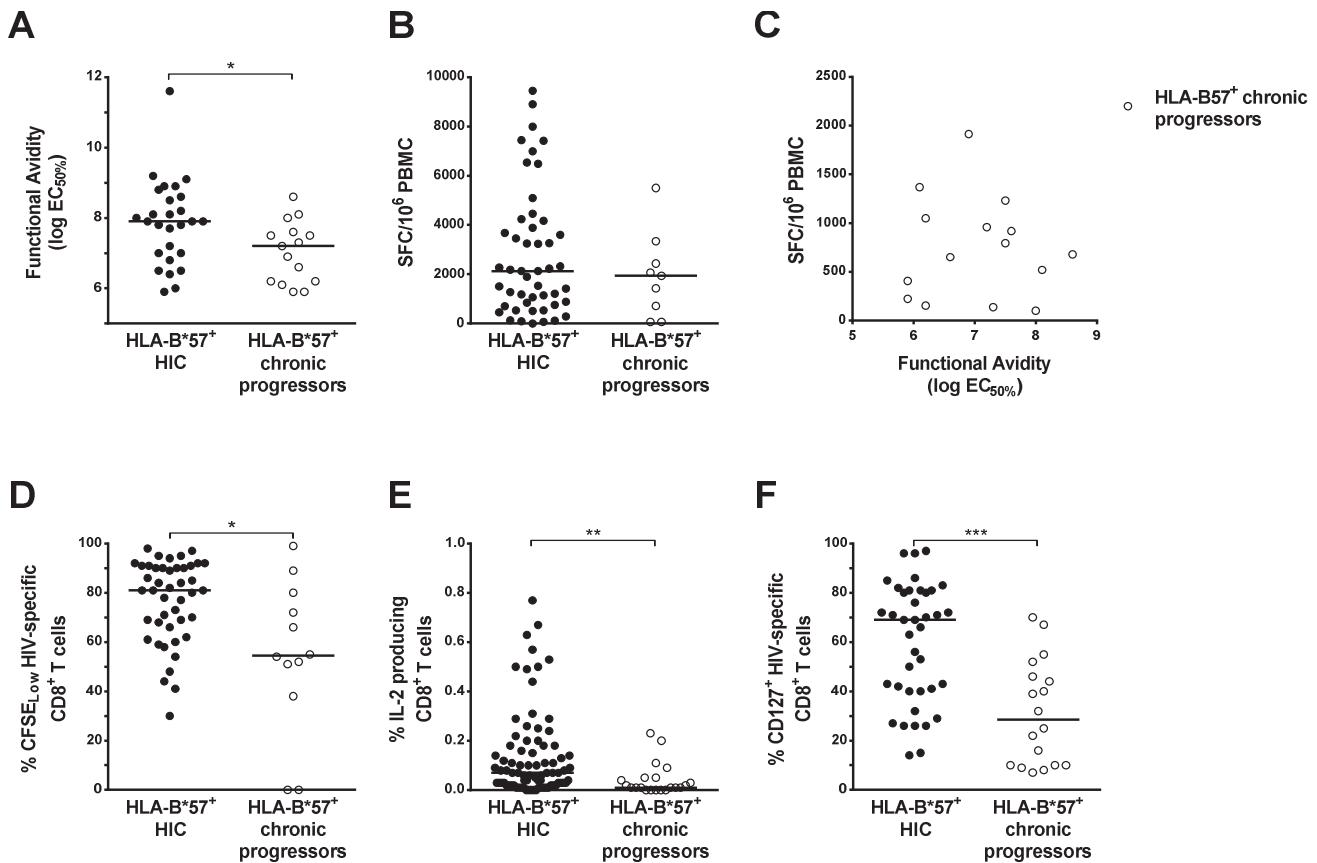


A**B**

Supplemental Figure 1: Intensities and recognition frequencies of HIV-specific CD8⁺ T cells measured by ELISpot IFN- γ for HLA-B*57-restricted peptides (A) and HLA-B*57 non-restricted peptides (B) in HLA-B*57⁺ (black circles) and HLA-B*57⁻ (clear circles) subjects.



Supplemental Figure 2: Qualitative features of HIV-specific CD8⁺ T cell responses restricted by HLA-B*57 in HLA-B*57⁺ HIC (black circles) and in HLA-B*57⁺ chronic progressors (clear circles). (A) Functional avidity was determined in an IFN- γ ELISpot assay using peptide dilutions and defined as the peptide concentration required to induce 50% of the maximal response (EC₅₀%). (B) Cumulative HLA-B*57-restricted responses were measured by IFN- γ ELISpot assay and are expressed as SFC/10⁶ PBMC. (C) Functional avidity do not correlate with the frequency of HIV-specific CD8⁺ T cells measured by ELISpot IFN- γ assay in HLA-B*57⁺ chronic progressors. (D) Percentages of HIV-specific CD8⁺ T cells CFSE_{Low} after 6 days of culture with the appropriate peptide. (E) Percentages of IL-2-producing CD8⁺ T cells after 15h of HIV-specific stimulation. (F) CD127 expression of HLA-B*57- restricted HIV-specific CD8⁺ T cells.

Supplemental Table: Comparison of the qualitative features of HIV-specific CD8⁺ T cells in HLA-B*57⁺ weak and strong viral suppressors (WVS and SVS) and in HLA-B*57⁻ weak and strong viral suppressors

| | HLA-B*57 ⁺ WVS | HLA-B*57 ⁺ SVS | P | HLA-B*57 ⁻ WVS | HLA-B*57 ⁻ SVS | P |
|---|---------------------------|------------------------------|------|---------------------------|---------------------------|-------|
| Number | 22 | 24 | | 28 | 22 | |
| Sensitivity (EC _{50%} M) | 10-8.1 [7.7-8.8] | 10 ^{-7.8} [6.8-8.8] | 0.57 | 10-6.7 [6.5-7.0] | 10-7.0 [6.4-7.7] | 0.52 |
| IFN-γ producing CD8 ⁺ T cells (%) | 0.24 [0.03-0.55] | 0.32 [0.11-0.55] | 0.18 | 0.04 [0.03-0.16] | 0.14 [0.01-0.51] | 0.93 |
| IL-2 producing CD8 ⁺ T cells (%) | 0.03 [0.01-0.12] | 0.07 [0.03-0.17] | 0.15 | 0.02 [0.01-0.04] | 0.01 [0.00-0.04] | 0.23 |
| CFSE _{low} HIV-specific CD8 ⁺ T cells (%) | 84 [68-92] | 80 [62-91] | 0.31 | 19 [3-57] | 16 [0-75] | 0.93 |
| CD127 ⁺ HIV-specific CD8 ⁺ T cells (%) | 70 [40-82] | 66 [40-80] | 0.77 | 45 [15-64] | 22 [13-43] | 0.34 |
| CD27 ⁺ CD45RO ⁺ HIV-specific CD8 ⁺ T cells (%) | 65 [48-70] | 48 [40-62] | 0.15 | 51 [41-59] | 42 [29-57] | 0.38 |
| CD57 ⁺ HIV-specific CD8 ⁺ T cells (%) | 22 [16-30] | 32 [21-48] | 0.12 | 41 [26-61] | 38 [33-66] | 0.80 |
| CD38 ⁺ HIV-specific CD8 ⁺ T cells (%) | 12 [8-23] | 13 [9-21] | 0.85 | 22 [13-31] | 11 [7-15] | <0.01 |
| HLA-DR ⁺ HIV-specific CD8 ⁺ T cells (%) | 34 [16-58] | 53 [38-66] | 0.04 | 37 [24-49] | 50 [41-61] | 0.03 |