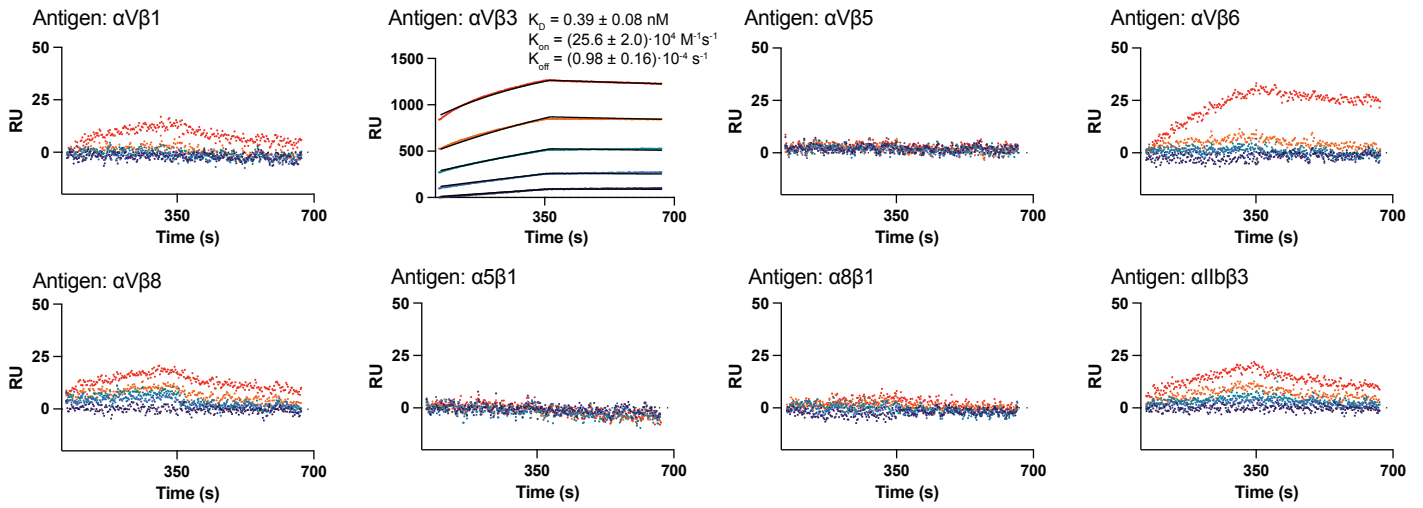
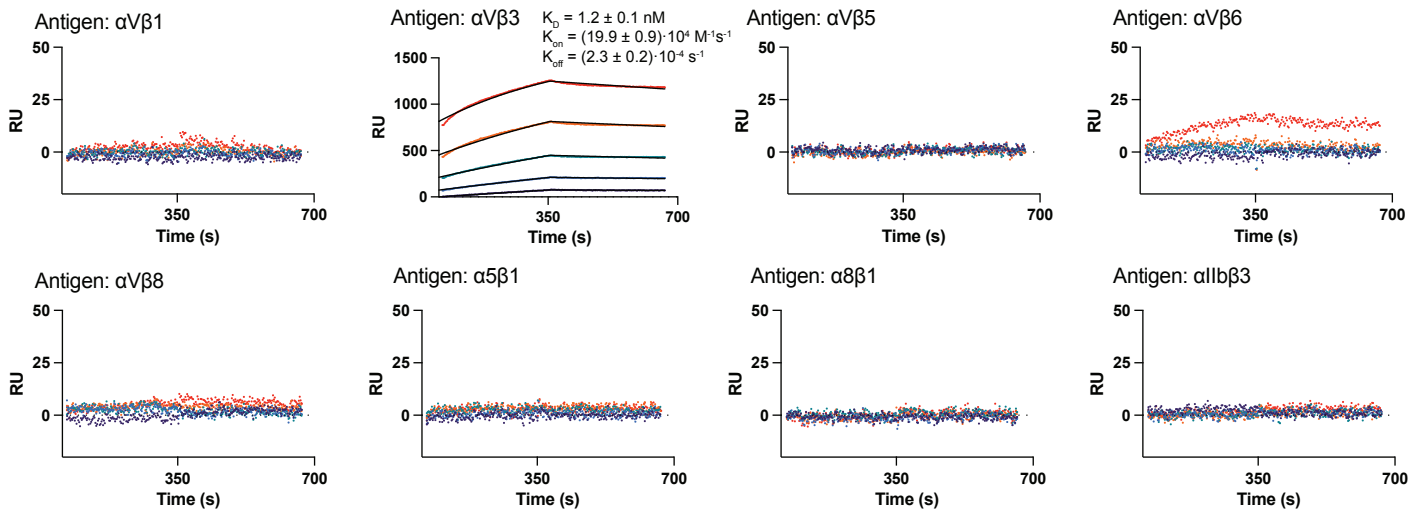
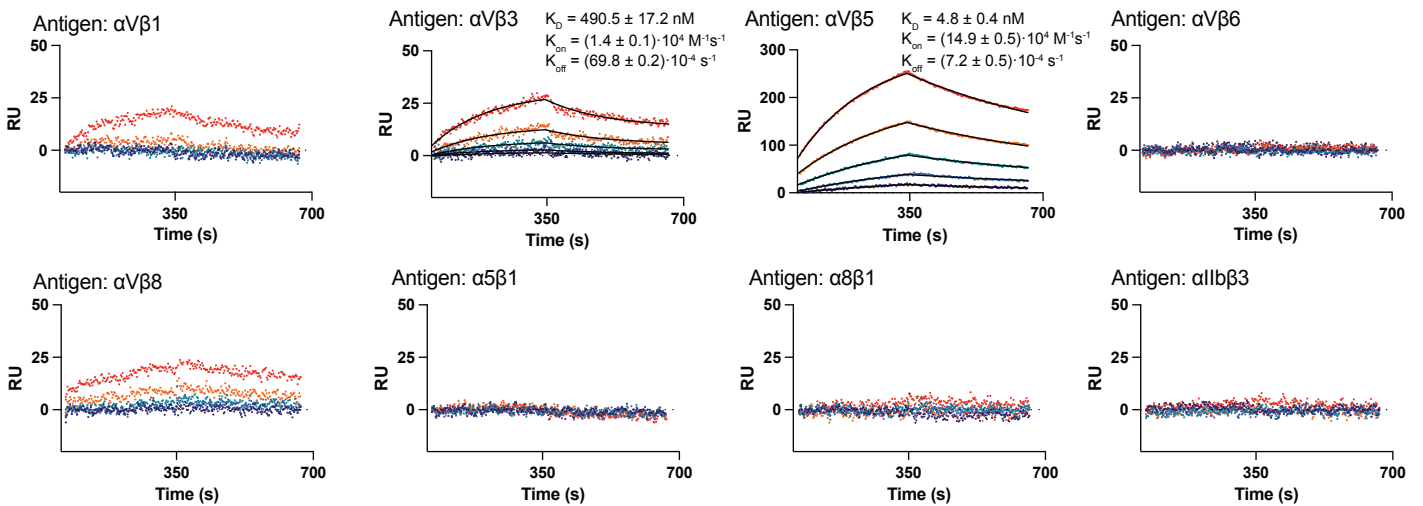
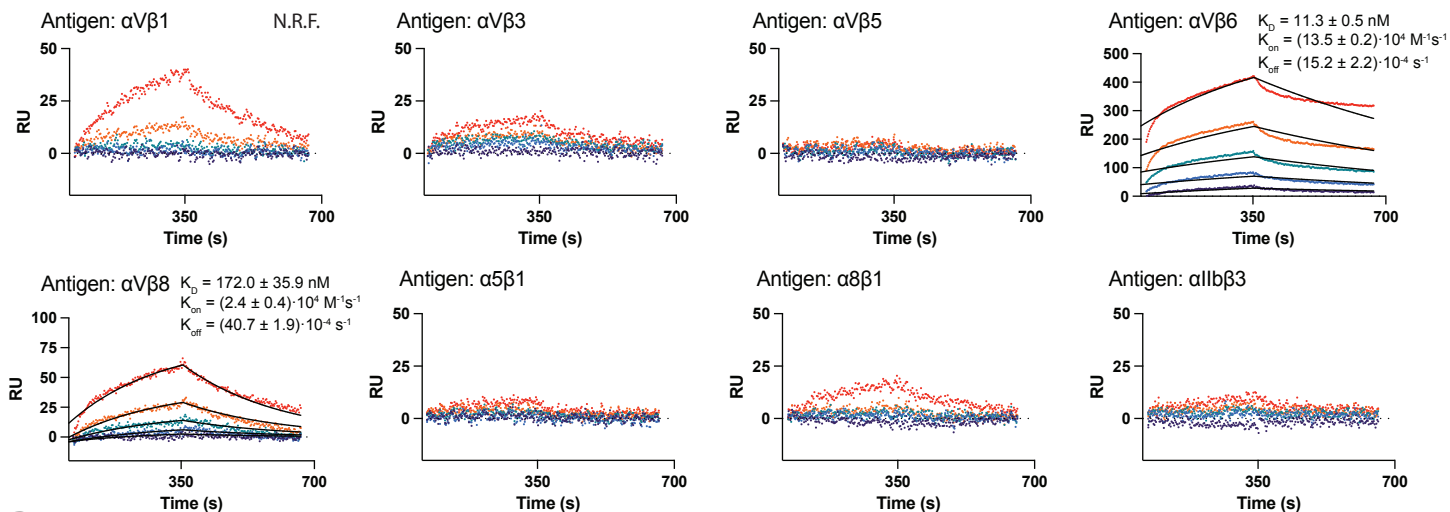
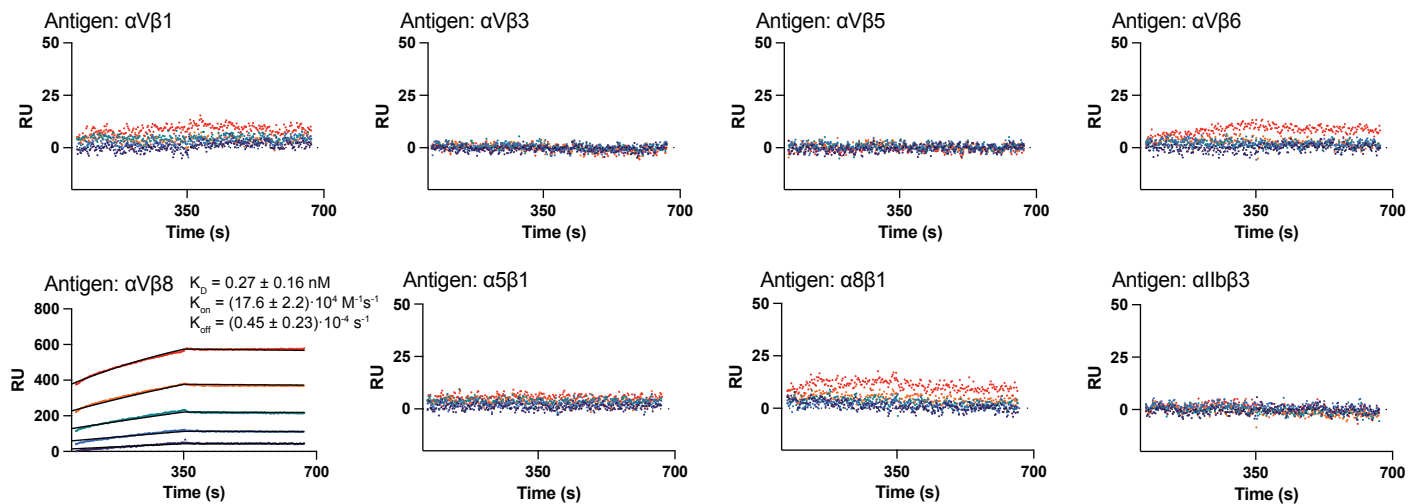
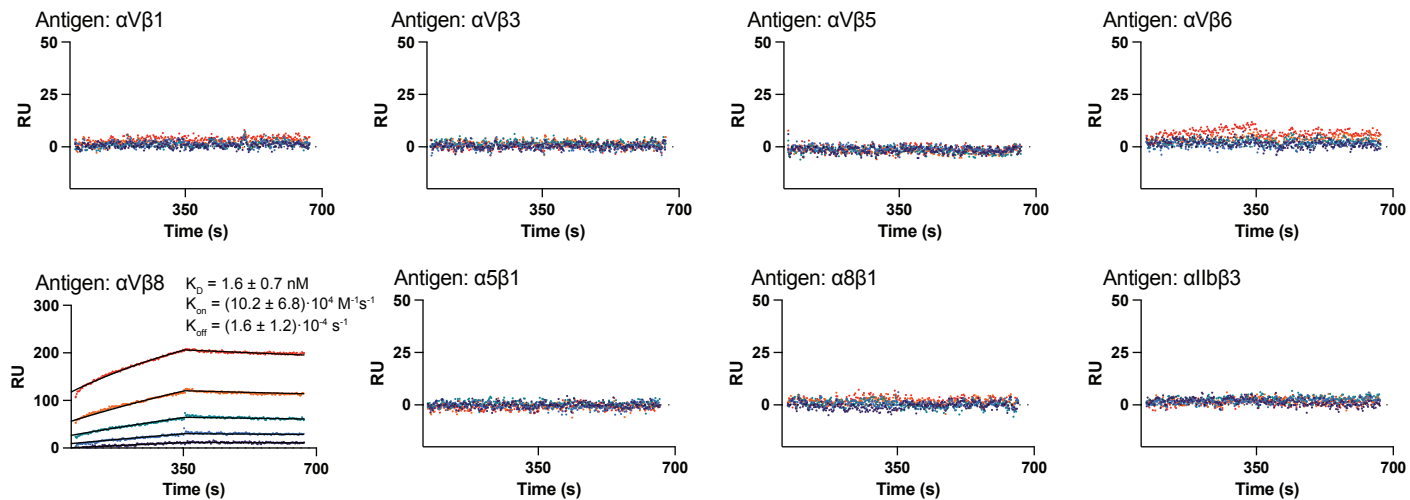


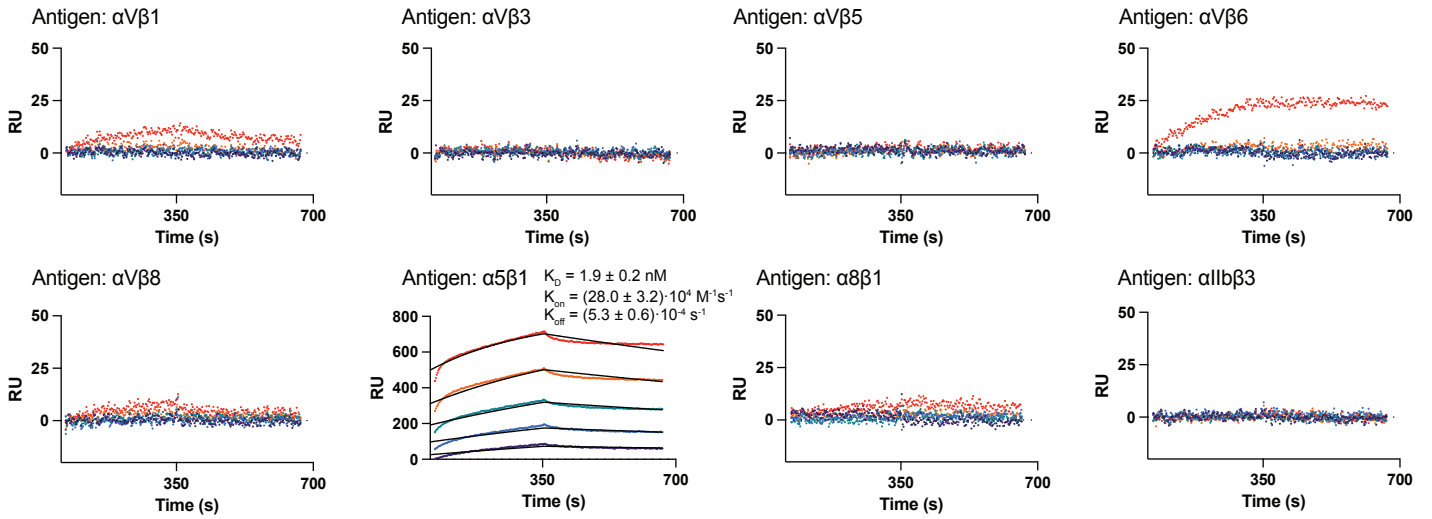
A**IPI- α V β 3.7****B****IPI- α V β 3.13****C****IPI- α V β 5.9****Supplemental Figure 1**



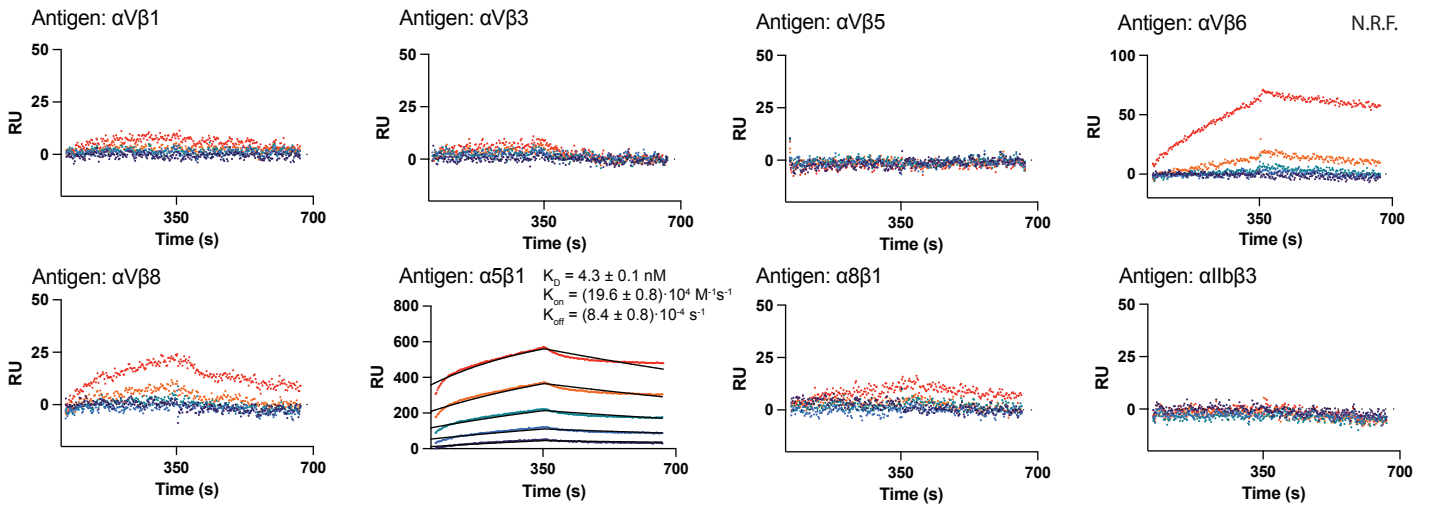
Supplemental Figure 2

A**IPI- α V β 6.2****B****IPI- α V β 8.1****C****IPI- α V β 8.8****Supplemental Figure 3**

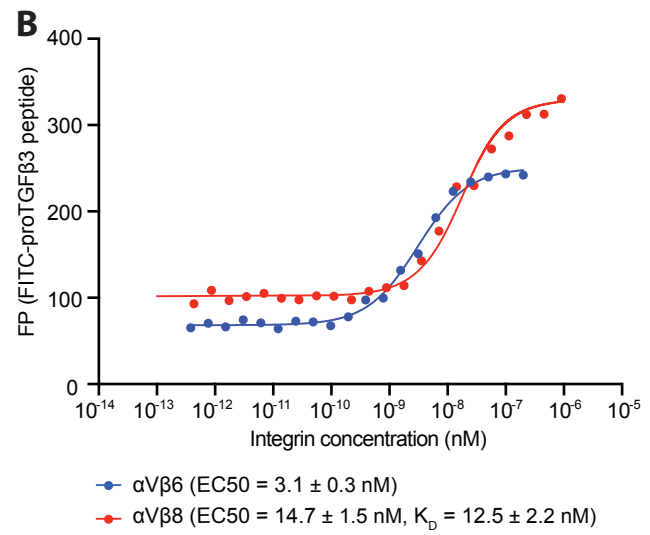
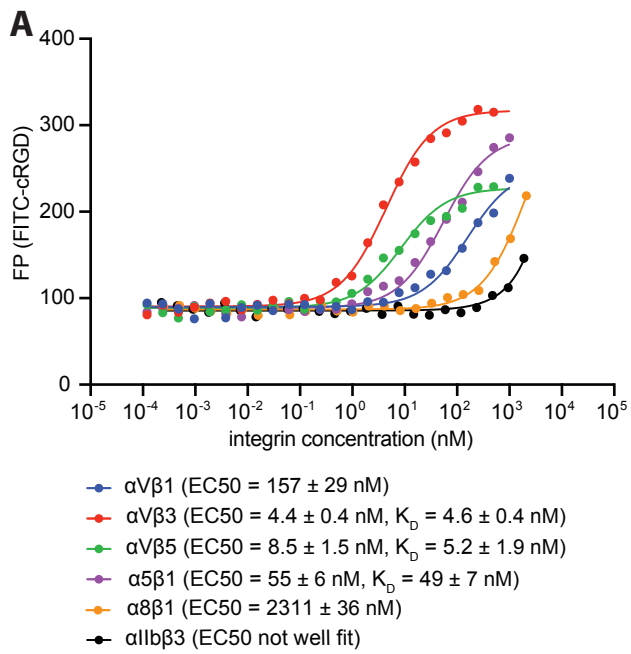
IPI- $\alpha 5\beta 1.2$



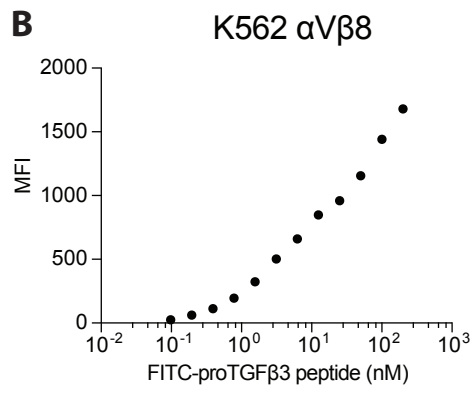
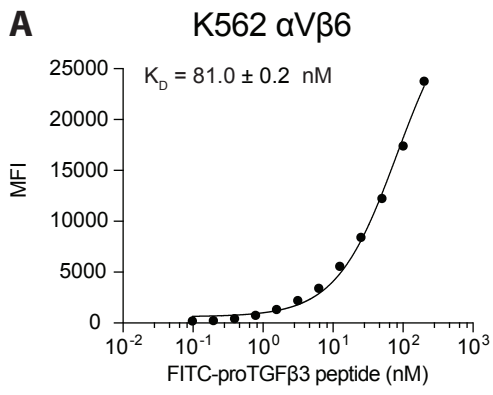
IPI- $\alpha 5\beta 1.4$



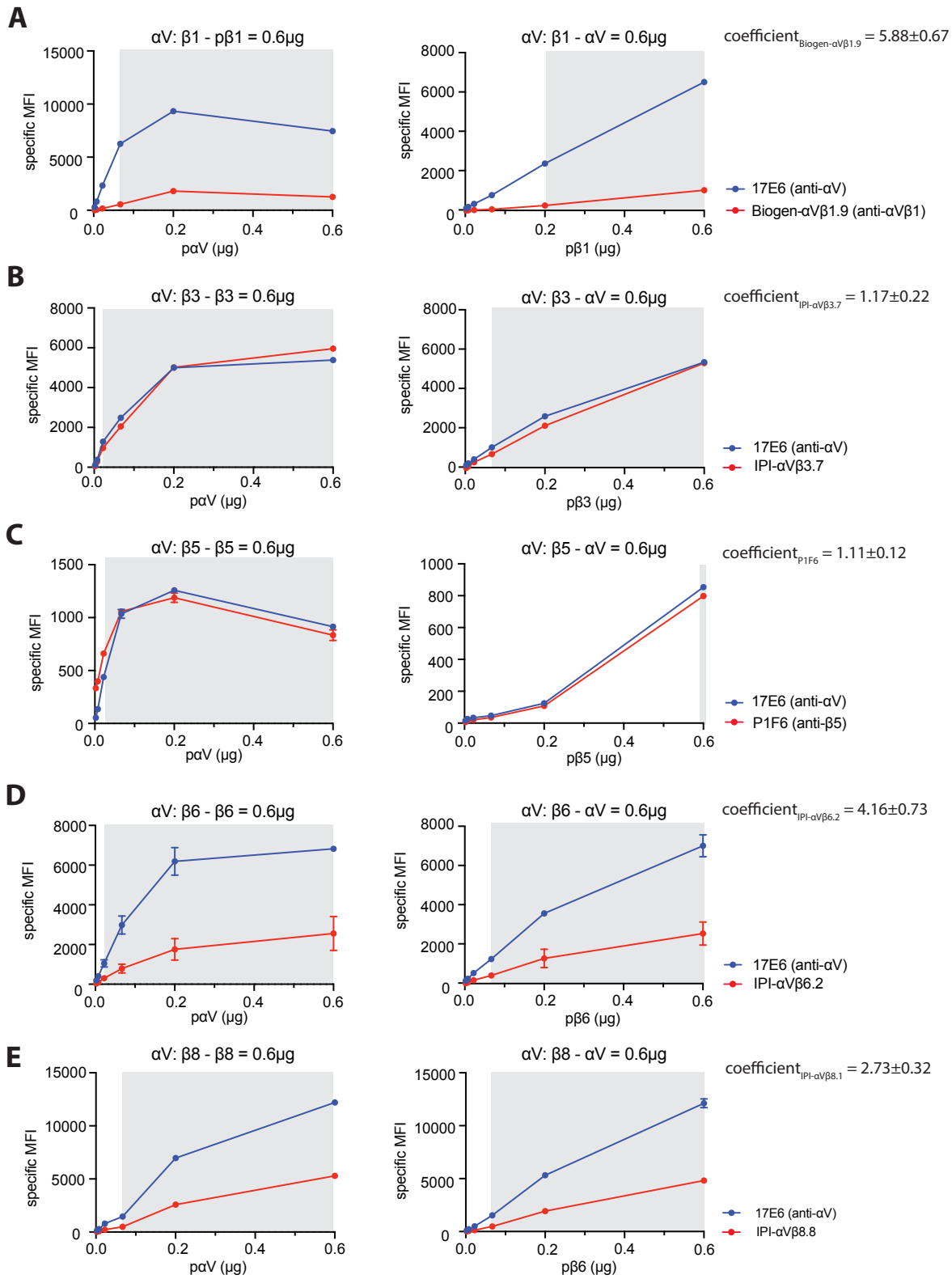
Supplemental Figure 4



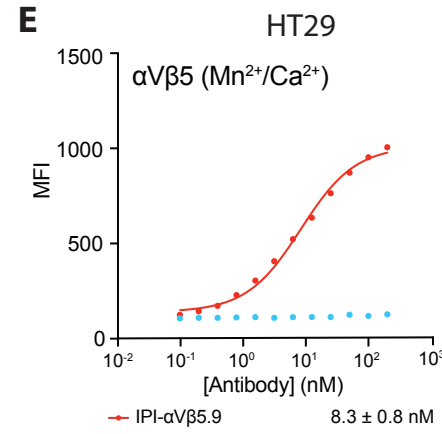
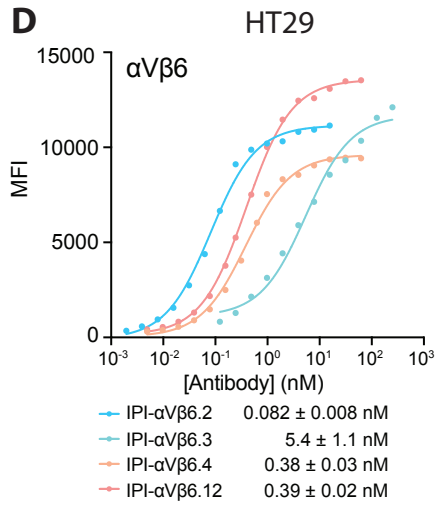
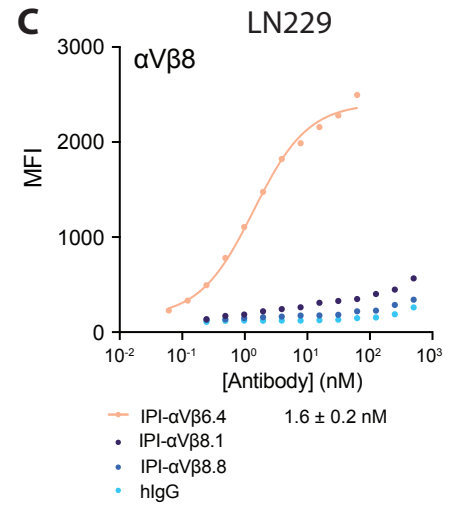
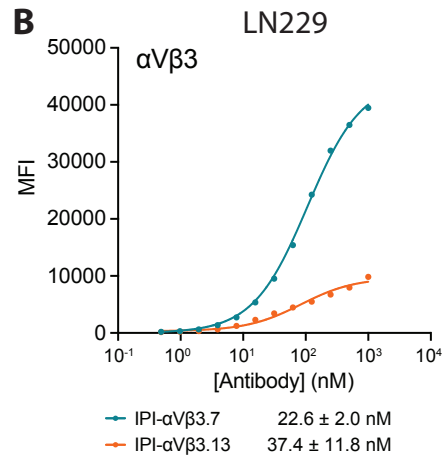
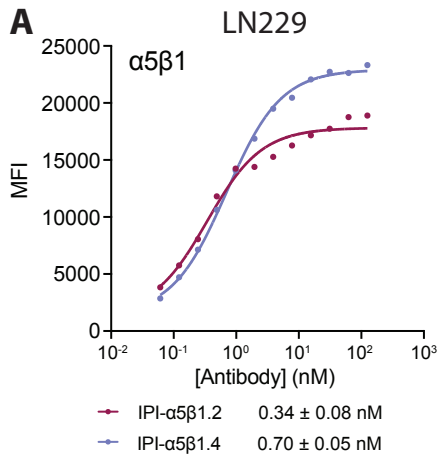
Supplemental Figure 5



Supplemental Figure 6



Supplemental Figure 7



Supplemental Figure 8

| Supplemental Table 1. K_D and kinetic rates of IPI integrin antibodies. | | | | |
|---|---------------------------|----------------------------------|--------------------------------|------------------|
| | | k_{on} ($10^4 M^{-1}s^{-1}$) | k_{off} ($10^{-4} s^{-1}$) | K_D (nM) |
| $\alpha V\beta 1$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | N.R.F. | N.R.F. | N.R.F. |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | N.R.F. | N.R.F. | N.R.F. |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| | IPI- $\alpha 5\beta 1.4$ | - | - | - |
| $\alpha V\beta 3$ ectodomain | IPI- $\alpha V\beta 3.7$ | 25.6 ± 2.0 | 0.98 ± 0.16 | 0.39 ± 0.08 |
| | IPI- $\alpha V\beta 3.13$ | 19.9 ± 0.9 | 2.3 ± 0.2 | 1.2 ± 0.1 |
| | IPI- $\alpha V\beta 5.9$ | 1.4 ± 0.1 | 69.8 ± 2.1 | 490.5 ± 17.2 |
| | IPI- $\alpha V\beta 6.2$ | - | - | - |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | - | - | - |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| | IPI- $\alpha 5\beta 1.4$ | - | - | - |
| $\alpha V\beta 5$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | 14.9 ± 0.5 | 7.2 ± 0.5 | 4.8 ± 0.4 |
| | IPI- $\alpha V\beta 6.2$ | - | - | - |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | - | - | - |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| | IPI- $\alpha 5\beta 1.4$ | - | - | - |
| $\alpha V\beta 6$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | 13.5 ± 0.2 | 15.2 ± 2.2 | 11.3 ± 0.5 |
| | IPI- $\alpha V\beta 6.3$ | 4.9 ± 0.3 | 1.1 ± 0.3 | 2.3 ± 0.6 |
| | IPI- $\alpha V\beta 6.4$ | 7.4 ± 2.0 | 7.1 ± 1.7 | 10.4 ± 4.7 |
| | IPI- $\alpha V\beta 6.12$ | 47.4 ± 4.6 | 10.4 ± 1.8 | 2.2 ± 0.2 |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| | IPI- $\alpha 5\beta 1.4$ | N.R.F. | N.R.F. | N.R.F. |

| Supplemental Table 1, cont. K₀ and kinetic rates of IPI integrin antibodies | | | | |
|---|---------------------------|----------------------------------|--------------------------------|------------------|
| | | k_{on} ($10^4 M^{-1}s^{-1}$) | k_{off} ($10^{-4} s^{-1}$) | K_d (nM) |
| $\alpha V\beta 8$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | 2.4 ± 0.4 | 40.7 ± 1.9 | 172.0 ± 35.9 |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | 1.3 ± 0.7 | 1.9 ± 1.4 | 18.9 ± 7.1 |
| | IPI- $\alpha V\beta 6.12$ | 1.1 ± 0.2 | 44.7 ± 12.6 | 386.9 ± 34.6 |
| | IPI- $\alpha V\beta 8.1$ | 17.6 ± 2.2 | 0.45 ± 0.23 | 0.27 ± 0.16 |
| | IPI- $\alpha V\beta 8.8$ | 10.2 ± 6.8 | 1.6 ± 1.2 | 1.6 ± 0.7 |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| IPI- $\alpha 5\beta 1.4$ | - | - | - | |
| $\alpha 5\beta 1$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | - | - | - |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | - | - | - |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | 28.0 ± 3.2 | 5.3 ± 0.6 | 1.9 ± 0.2 |
| IPI- $\alpha 5\beta 1.4$ | 19.6 ± 0.8 | 8.4 ± 0.8 | 4.3 ± 0.1 | |
| $\alpha 8\beta 1$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | - | - | - |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | - | - | - |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| IPI- $\alpha 5\beta 1.4$ | - | - | - | |
| $\alpha 11\beta 3$ ectodomain | IPI- $\alpha V\beta 3.7$ | - | - | - |
| | IPI- $\alpha V\beta 3.13$ | - | - | - |
| | IPI- $\alpha V\beta 5.9$ | - | - | - |
| | IPI- $\alpha V\beta 6.2$ | - | - | - |
| | IPI- $\alpha V\beta 6.3$ | - | - | - |
| | IPI- $\alpha V\beta 6.4$ | - | - | - |
| | IPI- $\alpha V\beta 6.12$ | - | - | - |
| | IPI- $\alpha V\beta 8.1$ | - | - | - |
| | IPI- $\alpha V\beta 8.8$ | - | - | - |
| | IPI- $\alpha 5\beta 1.2$ | - | - | - |
| IPI- $\alpha 5\beta 1.4$ | - | - | - | |

Gray cells represent antibody that bind to the targeting antigen.

-: non-significant binding; R_0 (Response units at the end of association phase) was less than 10% of the R_0 of specific antibodies on the same target antigen.

N.R.F.: No reliable fit. The R_0 was between 10% and 20% of the R_0 of specific antibodies on the same target antigen, but a fit with 3 or more concentrations of the antibody with an R square > 0.9 could not be obtained (Supplementary Figures 1-4).

