

S4 Table. Coefficients, R<sup>2</sup> values and significance values of the relationship between alpha diversity and box-cox transformed and then z-normalized immunogenicity responses calculated using the beta function in breakaway. Highlighting and FDR calculations were applied as described in Table 1. R<sup>2</sup> values were calculated from the pearson correlation coefficient between alpha diversity and median split immunogenicity values.

Type	Antigen	Month	Coef	R <sup>2</sup>	P	FDR
CD4+	Any ENV PTEG	6.5	<b>30.50</b>	0.13	<b>0.016</b>	<b>0.064</b>
		12.0	27.49	9.9e-04	0.094	0.235
IgA	gp41	0.0	-6.51	0.03	0.718	0.818
		6.5	2.15	0.06	0.890	0.890
		12.0	<b>32.88</b>	0.09	<b>0.045</b>	<b>0.150</b>
	p24	0.0	-6.77	2.8e-04	0.714	0.818
		6.5	15.87	0.03	0.374	0.680
		12.0	25.20	0.06	0.226	0.452
IgG	Con.6.gp120.B	6.5	6.48	2.4e-06	0.706	0.818
		12.0	5.36	7.9e-05	0.736	0.818
	gp41	0.0	10.14	1.2e-04	0.510	0.774
		6.5	<b>29.66</b>	0.18	<b>0.002</b>	<b>0.010</b>
		12.0	<b>31.71</b>	0.17	<b>&lt; 0.001</b>	<b>&lt;0.001</b>
	gp70 B.CaseA V1-V2	6.5	3.24	2.1e-03	0.861	0.890
		12.0	<b>36.15</b>	0.03	<b>&lt; 0.001</b>	<b>&lt;0.001</b>
	p24	0.0	-14.39	0.1	0.421	0.702
		6.5	21.71	0.14	0.175	0.389
		12.0	31.96	0.21	0.060	<b>0.171</b>
	ZM96.gp140	6.5	8.40	4.7e-04	0.542	0.774
		12.0	<b>32.21</b>	0.09	<b>&lt; 0.001</b>	<b>&lt;0.001</b>