

Highly Synergistic Drug Combination Prevents Vaginal HIV Infection in Humanized Mice

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Supplementary Information

The Supplementary Information includes the following data:

Figure S1: VRC01-N SDS-PAGE and Western blot images.

Appendix A: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N.

Appendix B: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N, TDF, FTC (broad dosing range).

Appendix C: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N, TDF, FTC (narrow dosing range).

Appendix D: Median-effect data used in the analysis.

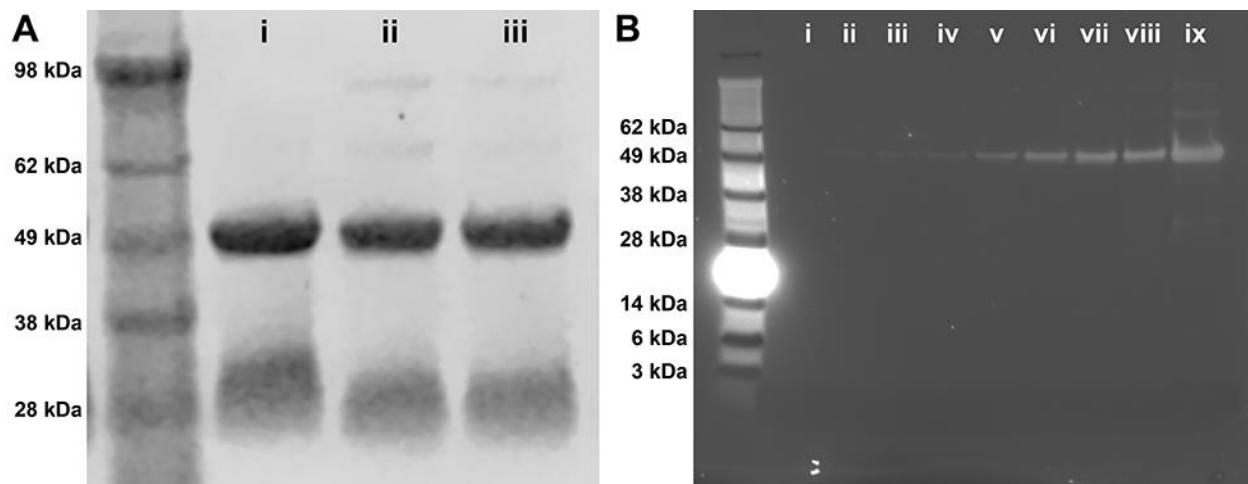


Figure S1. PAGE and Western blot analysis of VRC01. **A:** Coomassie-stained SDS-PAGE gel showing VRC01-*N*. **i:** NIH AIDS Reagent Program VRC01 reference material, 0.60 µg well⁻¹; **ii:** VRC01-*N* produced in *Nicotiana* spp. (2014), this study, 0.33 µg well⁻¹; **iii:** VRC01-*N* produced in *Nicotiana* spp. (2018), 0.31 µg well⁻¹. **B:** Western blot of VRC01-*N* (this study) over a 0.01-5 µg well⁻¹ range. **i:** 0.01 µg; **ii:** 0.05 µg; **iii:** 0.075 µg; **iv:** 0.1 µg; **v:** 0.25 µg; **vi:** 0.5 µg; **vii:** 0.75 µg; **viii:** 1.0 µg; **ix:** 5.0 µg.

Appendix A: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N.

Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	VRC01	% of Protection
1	66.2 +/- 0.3	79.2 +/- 1	N	0	0	0	0	0	1 mg/mL	100%
2	69.9 +/- 0.5	81.2 +/- 0.9		0	0	0	0	0		
3	70.3 +/- 0.5	77.3 +/- 1.1		0	0	0	0	0		
4	69.2 +/- 0.4	77.9 +/- 0.7		0	0	0	0	0		
5	66.9 +/- 0.5	78.6 +/- 1.2		0	0	0	0	0		
6	67.5 +/- 0.5	77.6 +/- 0.8		0	0	0	0	0		
7	70.1 +/- 0.4	80.1 +/- 0.7		0	0	0	0	0		
8	66.9 +/- 0.5	81.5 +/- 1.1		0	0	0	0	0		
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	VRC01	% of Protection
1	69.5 +/- 0.8	76.9 +/- 1.2	N	0	0	0	0	0	0.5 mg/mL	100%
2	67.9 +/- 0.7	78.2 +/- 0.8		0	0	0	0	0		
3	66.4 +/- 0.8	80.1 +/- 1.1		0	0	0	0	0		
4	70.1 +/- 0.5	78.6 +/- 1.3		0	0	0	0	0		
5	69.5 +/- 0.6	79.7 +/- 1.4		0	0	0	0	0		
6	69.3 +/- 0.7	79.4 +/- 1.3		0	0	0	0	0		
7	65.6 +/- 0.5	80.5 +/- 1.5		0	0	0	0	0		
8	69.1 +/- 0.7	78.7 +/- 1		0	0	0	0	0		
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	VRC01	% of Protection
1	68.8 +/- 1.1	76.7 +/- 1.4	N	0	0	0	0	0	0.25 mg/mL	50%
2	66.8 +/- 0.9	78.4 +/- 1.2		0	0	0	0	0		
3	70 +/- 1	75.6 +/- 1.5		Y	0.9 +/- 0.2	1.1 +/- 0.2	1.2 +/- 0.3	1.9 +/- 0.4		
4	69.2 +/- 0.9	80.2 +/- 1.3		0	0	0	0	0		
5	67.5 +/- 0.7	79.1 +/- 1.1		Y	0.7 +/- 0.2	1 +/- 0.3	1.3 +/- 0.4	2.1 +/- 0.8		
6	64.9 +/- 0.9	77.8 +/- 1.3		Y	0.9 +/- 0.3	1.2 +/- 0.3	1.4 +/- 0.6	1.8 +/- 0.5		
7	70.1 +/- 1.2	79.3 +/- 1.4		Y	0.8 +/- 0.4	1.1 +/- 0.2	1.5 +/- 0.4	2 +/- 0.6		
8	68.7 +/- 0.9	77.2 +/- 1.1		0	0	0	0	0		
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	VRC01	% of Protection
1	69.1 +/- 1.1	77.3 +/- 1.1	Y	0.8 +/- 0.2	1.2 +/- 0.3	1.4 +/- 0.3	1.7 +/- 0.3	1.9 +/- 0.4	0.125 mg/mL	13%
2	66.8 +/- 0.7	76.8 +/- 1.3		1 +/- 0.3	1.3 +/- 0.4	1.5 +/- 0.4	1.9 +/- 0.4	1.8 +/- 0.2		
3	70.1 +/- 0.6	78.2 +/- 1.5		0.7 +/- 0.2	0.9 +/- 0.2	1.2 +/- 0.2	1.7 +/- 0.2	1.9 +/- 0.4		
4	67.4 +/- 0.8	80.1 +/- 1.2		0.9 +/- 0.2	1.1 +/- 0.3	1.3 +/- 0.4	2.1 +/- 0.4	1.9 +/- 0.3		
5	65.7 +/- 0.6	76.4 +/- 0.7		0.8 +/- 0.1	1 +/- 0.2	1.2 +/- 0.3	1.9 +/- 0.3	1.9 +/- 0.5		
6	68.3 +/- 0.3	79.3 +/- 1.3		0	0	0	0	0		
7	67.6 +/- 0.4	78.4 +/- 0.7		0.9 +/- 0.3	1.2 +/- 0.2	1.4 +/- 0.1	2.2 +/- 0.4	2 +/- 0.3		
8	70.1 +/- 0.5	77.1 +/- 1.4		0.8 +/- 0.2	1 +/- 0.3	1.2 +/- 0.3	1.8 +/- 0.3	1.9 +/- 0.4		
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	VRC01	% of Protection
1	68.2 +/- 1.0	76.9 +/- 1.3	Y	0.6 +/- 0.2	0.8 +/- 0.2	1.2 +/- 0.3	1.6 +/- 0.3	1.9 +/- 0.4	0.0625 mg/mL	0%
2	66.9 +/- 0.7	78.1 +/- 1.1		0.9 +/- 0.3	1.1 +/- 0.1	1.4 +/- 0.4	1.8 +/- 0.4	2.0 +/- 0.3		
3	70.3 +/- 0.4	75.4 +/- 1.2		1.0 +/- 0.2	1.2 +/- 0.3	1.5 +/- 0.2	1.9 +/- 0.3	2.2 +/- 0.4		
4	67.7 +/- 1.2	78.2 +/- 1.1		0.8 +/- 0.2	1.0 +/- 0.2	1.3 +/- 0.2	1.7 +/- 0.2	1.9 +/- 0.3		
5	65.7 +/- 0.6	81.2 +/- 0.9		0.9 +/- 0.2	1.2 +/- 0.2	1.4 +/- 0.4	2.1 +/- 0.4	1.8 +/- 0.4		
6	67.1 +/- 0.5	77.6 +/- 1.2		0.7 +/- 0.1	0.9 +/- 0.2	1.2 +/- 0.3	1.7 +/- 0.3	1.8 +/- 0.3		
7	68.7 +/- 0.4	78.1 +/- 0.7		1.1 +/- 0.3	1.3 +/- 0.3	1.5 +/- 0.4	1.9 +/- 0.2	2.1 +/- 0.4		
8	70.5 +/- 0.6	76.1 +/- 1.1		0.8 +/- 0.1	1.1 +/- 0.2	1.3 +/- 0.3	2.0 +/- 0.4	1.9 +/- 0.3		

Plasma viral RNA (10⁵ copies/mL)

NOTE: VRC01-N active makes up 50% of the mass indicated above; the remainder consists of excipients

Appendix B: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N, TDF, FTC (broad dosing range).

Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	TDF/FTC/VRC01	% of Protection
1	70.2 +/- 0.3	75.5 +/- 1.0	N	0	0	0	0	0	1 μM TDF + 0.0625 μM FTC + 0.0625 mg/mL VRC01	20%
2	68.5 +/- 0.4	78.4 +/- 0.8	Y	0.8 +/- 0.1	1.2 +/- 0.4	1.5 +/- 0.3	1.9 +/- 0.3	1.9 +/- 0.2		
3	69.1 +/- 0.3	75.9 +/- 0.6	Y	0.7 +/- 0.2	1.1 +/- 0.2	1.4 +/- 0.2	2.0 +/- 0.2	2.1 +/- 0.3		
4	68.4 +/- 0.5	75.6 +/- 0.9	Y	0.5 +/- 0.1	0.9 +/- 0.1	1.6 +/- 0.3	2.2 +/- 0.4	2.1 +/- 0.1		
5	71.2 +/- 0.6	77.5 +/- 1.2	Y	0.6 +/- 0.2	0.9 +/- 0.2	1.4 +/- 0.2	2.1 +/- 0.5	1.9 +/- 0.4		
6	67.9 +/- 0.5	78.9 +/- 0.9	Y	0.9 +/- 0.2	1.2 +/- 0.2	1.3 +/- 0.4	1.9 +/- 0.2	2.0 +/- 0.2		
7	70.2 +/- 0.6	75.7 +/- 0.7	Y	0.7 +/- 0.1	1.1 +/- 0.1	1.6 +/- 0.3	2.1 +/- 0.3	1.9 +/- 0.3		
8	67.8 +/- 0.3	77.3 +/- 1.1	Y	0.6 +/- 0.2	0.9 +/- 0.2	1.4 +/- 0.1	1.9 +/- 0.2	2.0 +/- 0.3		
9	69.3 +/- 0.6	76.8 +/- 0.7	N	0	0	0	0	0		
10	65.8 +/- 0.3	78.5 +/- 0.9	Y	0.8 +/- 0.2	1.3 +/- 0.2	1.6 +/- 0.2	2.2 +/- 0.3	2.1 +/- 0.2		
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Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12		% of Protection
1	71.2 +/- 0.4	76.6 +/- 1.2	N	0	0	0	0	0		
2	69.5 +/- 0.7	74.9 +/- 0.8	N	0	0	0	0	0		
3	67.9 +/- 0.5	78.2 +/- 1.1	N	0	0	0	0	0		
4	70.1 +/- 0.7	78.8 +/- 0.7	N	0	0	0	0	0		
5	68.5 +/- 0.5	76.4 +/- 1.1	N	0	0	0	0	0	2 μM TDF + 0.125 μM FTC + 0.125 mg/mL VRC01	100%
6	66.9 +/- 0.7	77.4 +/- 1.2	N	0	0	0	0	0		
7	69.9 +/- 0.4	77.3 +/- 1.1	N	0	0	0	0	0		
8	68.5 +/- 0.6	75.8 +/- 0.6	N	0	0	0	0	0		
9	69.8 +/- 0.6	81.2 +/- 1.2	N	0	0	0	0	0		
10	68.4 +/- 0.5	78.3 +/- 0.9	N	0	0	0	0	0		
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Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12		% of Protection
1	69.3 +/- 0.6	77.5 +/- 1.2	N	0	0	0	0	0		
2	67.6 +/- 0.9	78.5 +/- 1.2	N	0	0	0	0	0		
3	70.1 +/- 0.5	74.5 +/- 0.8	N	0	0	0	0	0		
4	69.1 +/- 0.8	73.8 +/- 0.6	N	0	0	0	0	0		
5	65.4 +/- 1.1	77.2 +/- 0.9	N	0	0	0	0	0	4 μM TDF + 0.25 μM FTC + 0.25 mg/mL VRC01	100%
6	68.6 +/- 0.5	81.3 +/- 1.3	N	0	0	0	0	0		
7	65.6 +/- 0.8	79.4 +/- 0.8	N	0	0	0	0	0		
8	68.5 +/- 0.7	77.2 +/- 1.1	N	0	0	0	0	0		
9	71.2 +/- 0.6	75.6 +/- 1.2	N	0	0	0	0	0		
10	66.5 +/- 0.7	77.4 +/- 1.0	N	0	0	0	0	0		
<hr/>										
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12		% of Protection
1	69.3 +/- 0.9	76.5 +/- 1.1	N	0	0	0	0	0		
2	65.8 +/- 0.6	74.9 +/- 1.2	N	0	0	0	0	0		
3	70.1 +/- 1.1	75.5 +/- 0.9	N	0	0	0	0	0		
4	66.8 +/- 0.8	77.6 +/- 1.1	N	0	0	0	0	0		
5	66.4 +/- 0.5	79.2 +/- 0.9	N	0	0	0	0	0	8 μM TDF + 0.5 μM FTC + 0.5 mg/mL VRC01	100%
6	68.3 +/- 0.9	81.0 +/- 1.3	N	0	0	0	0	0		
7	66.5 +/- 0.6	76.5 +/- 0.7	N	0	0	0	0	0		
8	71.2 +/- 0.7	79.2 +/- 1.1	N	0	0	0	0	0		
9	69.1 +/- 1.2	75.6 +/- 1.3	N	0	0	0	0	0		
10	66.4 +/- 0.9	77.5 +/- 1.2	N	0	0	0	0	0		
<hr/>										
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12		% of Protection
1	69.2 +/- 1.0	76.1 +/- 1.1	N	0	0	0	0	0		
2	66.5 +/- 0.8	74.1 +/- 1.2	N	0	0	0	0	0		
3	68.4 +/- 0.6	75.4 +/- 1.1	N	0	0	0	0	0		
4	67.3 +/- 0.8	78.5 +/- 1.3	N	0	0	0	0	0		
5	67.4 +/- 0.9	74.7 +/- 0.9	N	0	0	0	0	0	16 μM TDF + 1 μM FTC + 1 mg/mL VRC01	100%
6	69.4 +/- 0.5	79.3 +/- 1.2	N	0	0	0	0	0		
7	66.4 +/- 0.8	75.4 +/- 0.8	N	0	0	0	0	0		
8	65.6 +/- 0.6	75.4 +/- 1.1	N	0	0	0	0	0		
9	69.4 +/- 0.9	76.3 +/- 1.3	N	0	0	0	0	0		
10	66.5 +/- 0.7	75.9 +/- 1.2	N	0	0	0	0	0		

Plasma viral RNA (10⁵ copies/mL)

NOTE: VRC01-N active makes up 50% of the mass indicated above; the remainder consists of excipients

Appendix C: BLT mouse efficacy data from HIV vaginal challenge studies following vaginal administration of VRC01-N, TDF, FTC (narrow dosing range).

Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	% of Protection
1	68.4 +/- 0.6	73.8 +/- 2.4	N	0	0	0	0	0	
2	69.9 +/- 0.4	71.1 +/- 1.7	N	0	0	0	0	0	
3	70.1 +/- 0.8	75.5 +/- 2	N	0	0	0	0	0	
4	67.6 +/- 1.2	76.1 +/- 1.5	N	0	0	0	0	0	
5	69.6 +/- 0.9	73.8 +/- 2.4	N	0	0	0	0	0	
6	65.8 +/- 1.1	75.2 +/- 2.2	N	0	0	0	0	0	
7	69.3 +/- 0.7	76.1 +/- 1.5	N	0	0	0	0	0	
8	66.4 +/- 1	73.7 +/- 1.9	N	0	0	0	0	0	
9	69.2 +/- 1.2	76.1 +/- 2.3	N	0	0	0	0	0	
10	65.6 +/- 1.4	74.9 +/- 1.7	N	0	0	0	0	0	
									2 μM TDF + 0.125 μM FTC + 0.125 mg/mL VRC01 100%
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	% of Protection
1	66.4 +/- 1.3	73.5 +/- 2.3	N	0	0	0	0	0	
2	63.8 +/- 2.4	76.1 +/- 1.8	N	0	0	0	0	0	
3	65.1 +/- 1.8	72.6 +/- 2.5	Y	0.7 +/- 0.2	1.2 +/- 0.3	1.5 +/- 0.2	2.1 +/- 0.3	2.2 +/- 0.3	
4	65.7 +/- 1.5	74.2 +/- 1.9	N	0	0	0	0	0	
5	64.6 +/- 2.2	73.8 +/- 1.6	N	0	0	0	0	0	
6	63.8 +/- 1.9	77.2 +/- 2.1	N	0	0	0	0	0	
7	64.6 +/- 1.3	74.2 +/- 1.6	N	0	0	0	0	0	
8	66.7 +/- 1.3	76.2 +/- 2.2	N	0	0	0	0	0	
9	66.8 +/- 2.1	74.6 +/- 1.8	N	0	0	0	0	0	
10	63.7 +/- 2.2	73.7 +/- 2	N	0	0	0	0	0	
									1.75 μM TDF + 0.1094 μM FTC + 0.109 mg/mL VRC01 90%
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	% of Protection
1	65.2 +/- 1.1	74.2 +/- 1.5	N	0	0	0	0	0	
2	62.9 +/- 1.4	77.1 +/- 2.1	N	0	0	0	0	0	
3	63.6 +/- 1.5	73.7 +/- 2.3	Y	0.6 +/- 0.1	1.1 +/- 0.2	1.6 +/- 0.4	2.3 +/- 0.2	2.4 +/- 0.2	
4	66.1 +/- 2.1	77.1 +/- 2.4	N	0	0	0	0	0	
5	62.9 +/- 1.6	75.2 +/- 1.8	N	0	0	0	0	0	
6	64.4 +/- 2	75.3 +/- 1.6	Y	0.7 +/- 0.2	1.3 +/- 0.3	1.8 +/- 0.3	2.2 +/- 0.3	2.3 +/- 0.4	
7	65.2 +/- 1.7	75.1 +/- 2.2	N	0	0	0	0	0	
8	68.3 +/- 1.3	77.4 +/- 1.8	Y	0.9 +/- 0.3	1.4 +/- 0.2	1.8 +/- 0.4	2.4 +/- 0.4	2.2 +/- 0.3	
9	63.1 +/- 1.5	75.5 +/- 2.4	N	0	0	0	0	0	
10	65.4 +/- 1.9	73.7 +/- 1.9	N	0	0	0	0	0	
									1.5 μM TDF + 0.0938 μM FTC + 0.0938 mg/mL VRC01 70%
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	% of Protection
1	64.4 +/- 2.2	73.4 +/- 2.2	Y	0.6 +/- 0.2	1.0 +/- 0.2	1.4 +/- 0.3	2.1 +/- 0.4	2.3 +/- 0.3	
2	62.9 +/- 1.6	71.3 +/- 1.6	N	0	0	0	0	0	
3	64.6 +/- 2.1	73.3 +/- 1.8	N	0	0	0	0	0	
4	66.2 +/- 1.5	74.2 +/- 1.3	Y	0.7 +/- 0.1	1.3 +/- 0.3	1.7 +/- 0.3	2.4 +/- 0.2	2.2 +/- 0.4	
5	65.1 +/- 1.8	71.8 +/- 1.5	Y	0.5 +/- 0.1	1.2 +/- 0.2	1.5 +/- 0.2	2.3 +/- 0.1	2.4 +/- 0.3	
6	63.3 +/- 1.5	75.7 +/- 2.1	Y	0.4 +/- 0.2	1.0 +/- 0.3	1.6 +/- 0.3	2.2 +/- 0.3	2.3 +/- 0.1	
7	66.2 +/- 2.3	77.2 +/- 1.6	N	0	0	0	0	0	
8	65.3 +/- 1.9	72.9 +/- 1.7	Y	0.6 +/- 0.1	1.2 +/- 0.3	1.7 +/- 0.4	2.2 +/- 0.4	2.6 +/- 0.2	
9	63.8 +/- 2.1	74.2 +/- 2.1	N	0	0	0	0	0	
10	64.1 +/- 1.7	73.7 +/- 1.9	Y	0.5 +/- 0.2	1.3 +/- 0.4	1.8 +/- 0.3	2.4 +/- 0.3	2.4 +/- 0.6	
									1.25 μM TDF + 0.0781 μM FTC + 0.0781 mg/mL VRC01 40%
Mice	Human CD45+ cells (% +/- S.D.)	Human T cells (% +/- S.D.)	HIV-1 positive mice	Week 1	Week 2	Week 3	Week 6	Week 12	% of Protection
1	63.1 +/- 0.6	72.5 +/- 2.2	Y	0.4 +/- 0.1	1.2 +/- 0.3	1.6 +/- 0.3	2.2 +/- 0.4	2.3 +/- 0.1	
2	64.1 +/- 1.2	70.8 +/- 1.6	Y	0.5 +/- 0.2	0.9 +/- 0.1	1.4 +/- 0.2	1.8 +/- 0.3	2.2 +/- 0.3	
3	62.9 +/- 2.1	75.5 +/- 1.1	Y	0.6 +/- 0.2	1.0 +/- 0.2	1.6 +/- 0.4	2.1 +/- 0.3	2.6 +/- 0.5	
4	65.2 +/- 1.7	76.3 +/- 3.1	Y	0.6 +/- 0.1	1.3 +/- 0.2	1.5 +/- 0.3	2.3 +/- 0.4	2.4 +/- 0.4	
5	63.2 +/- 2.3	73.3 +/- 0.7	Y	0.4 +/- 0.2	0.9 +/- 0.2	1.5 +/- 0.1	2.0 +/- 0.3	2.3 +/- 0.2	
6	65.3 +/- 3.1	75.5 +/- 1.9	Y	0.5 +/- 0.1	1.1 +/- 0.3	1.5 +/- 0.2	2.2 +/- 0.4	2.6 +/- 0.4	
7	64.4 +/- 2.5	71.6 +/- 2.4	Y	0.5 +/- 0.2	1.3 +/- 0.1	1.7 +/- 0.3	2.1 +/- 0.2	2.3 +/- 0.4	
8	66.1 +/- 1.9	74.8 +/- 1.6	Y	0.6 +/- 0.2	1.2 +/- 0.1	1.7 +/- 0.4	2.5 +/- 0.4	2.4 +/- 0.2	
9	64.4 +/- 2.2	72.7 +/- 0.9	Y	0.3 +/- 0.1	0.9 +/- 0.2	1.3 +/- 0.2	1.9 +/- 0.3	2.2 +/- 0.4	
10	62.8 +/- 3.3	71.5 +/- 1.8	Y	0.4 +/- 0.2	1.0 +/- 0.2	1.7 +/- 0.2	2.4 +/- 0.5	2.4 +/- 0.2	
									0.5 μM TDF + 0.0313 μM FTC + 0.0313 mg/mL VRC01 0%

Plasma viral RNA (10^5 copies/mL)

NOTE: VRC01-N active makes up 50% of the mass indicated above; the remainder consists of excipients

Appendix D: Median-effect data used in the analysis.

Median-Effect Data					
VRC01-N, single drug		TDF-FTC-VRC01-N			
Log(D) (nM)	Efficacy (%)	log(D) (nM)	Efficacy (%)		
			Study 1	Study 2	
3.503	100	3.101	20		
3.202	100	3.402	100		
2.901	50	3.703	100		
2.600	13	4.004	100		
2.299	0	4.305	100		
		2.800		0	
		3.198		40	
		3.277		70	
		3.344		90	
		3.402		100	
Log(D) (nM)	TDF	FTC	VRC01-N	Triple	
3.000	-2.601				
3.301	-0.954				
3.602	-0.176				
4.204	1.996				
4.505	1.996				
1.398		-1.591			
1.699		-0.954			
2.301		0.000			
2.602		0.602			
2.778		1.996			
3.503			1.996		
3.202			1.996		
2.901			0.000		
2.600			-0.845		
2.299			-2.601		
3.101				-0.602	
2.800				-2.601	
3.198				-0.176	
3.277				0.368	
3.344				0.954	
3.402				1.996	
DRI					
Fa	CI Study 1	CI Study 2	Fa	TDF	FTC
0.0025		2.84	0.0025	1.47	0.64
0.2	1.30		0.2	3.24	1.64
0.4		1.19	0.4	3.56	1.85
0.7		0.96	0.7	4.45	2.41
0.9		0.74	0.9	5.90	3.34
0.99	0.40		0.99		5.94
0.999	0.40		0.999		5.29
0.9999	0.41		0.9999		4.71