Table S1

Table S1. Generation of HIV-1 isolates from plasma and peripheral blood mononuclear cells of 10 prospectively sampled individuals

Subject[1]	Number of TF viruses[2]	Date[3]	DFOSx[4]	Viral load (copies/ml)	CD4 count (cells/µl)	Number of SGA derived viral sequences (plasma)[5]	Number of SGA derived viral sequences (PBMC)[6]	Number of limiting dilution isolates (plasma)[7]	Number of bulk isolates (plasma)[8]	Number of outgrowth viruses (PBMC)[9]
MM14		21-Jun-01	11	6,235,600						
		12-Jul-01	32	1,950,600	420					
	2	20-Jul-01	40	37,611,600	430	9			3 (2)	
		27-Jul-01	47	2,162,300	460					
		2-Aug-01	53	613,400	530					
		9-Aug-01	60	269,000	490					
	SI	26-Oct-01	138	15,800	480	9			2	
		6-Dec-01	179	27,200	380					
		7-Mar-02	270	52,700	390	3			2	
		11-Nov-02	519	45,300	390	14			2	
		9-Jan-03	578	16,000	420					
		2-Jun-03	722	44,400	240	5			2 (1)	
		6-Oct-03	848	30,100	330					
		20-Apr-04	1,045			3			2 (1)	
		4-Oct-04	1,212	6,100	320					
		24-Jan-05	1,324	12,600	210	3			2	
		4-Apr-05	1,394	19,700	340	4			2	
		1-Aug-05	1,513	52,500	210					
		19-Sep-05	1,562		200					
		16-Jan-06	1,681	14,000	280					
		13-Feb-06	1,709	100	340					
		27-Mar-06	1,751	50	380					
		26-Jun-06	1,842	50	270					
		27-Nov-06	1,996	200	440					
		19-Feb-07	2,080	50	630					
		18-Jun-07	2,199	50	620					
		19-Nov-07	2,353	50	660					
		30-Sep-08	2,669	50	610					
		9-Mar-09	2,829	50	520					
		18-Aug-09	2,991	50	630					
		9-Nov-09	3,074	50	770					
		8-Mar-10	3,193	50	630					1
		15-Mar-12	3,931	50	790					
		22-Oct-13	4,517	240	640					
MM15		6-Sep-01	5	39,000						
		21-Sep-01	20	10,600	1,070					
	1	28-Sep-01	27	13,200	1,200	15			3 (1)	
		8-Oct-01	37	28,600	1,030	17			4 (1)	
		15-Oct-01	44	24,500	970					
		29-Oct-01	58	127,200	980					
		19-Nov-01	79	59,900	1,450	11			1 (1)	
		17-Dec-01	107	381,500	820	15			1 (1)	
		11-Mar-02	191	43,200	660	6			1 (1)	
		10-Jun-02	282	110,700	620					
		9-Sep-02	373	45,200	420	7			1 (1)	
		9-Dec-02	464	69,900	370					
		3-Mar-03	548	41,700	260	6			1 (1)	
		17-Apr-03	593	19,400	280					
		30-Apr-03	606	39,700						
		9-Jun-03	646	22,800	240					
		22-Aug-03	720	27,500	320	9			1	
		10-Oct-03	769	27,000	220					
		10-Nov-03	800	70	450					
		10-Dec-03	830	4,300	310					
		9-Jan-04	860	50	460					
		22-Mar-04	933	50	540					
		23-Jun-04	1,026	50	430					
		15-Dec-04	1,201	50	560					
		11-May-05	1,348	50	580					
		5-Jul-05	1,403	50	700					1
		5-Jan-06	1,587	50	750					
		22-Aug-06	1,816	50	820					
		16-Jan-07	1,963	200	570					
		9-Aug-07	2,168	50	940					
		22-Jan-08	2,334	50	700					
		12-Jun-08	2,476	50	750					
		9-Jan-09	2,687	50	900					
		29-Apr-09	2,797	250	950					
		13-May-09	2,811	50						
		1-Feb-10	3,075	50	1,000					
		1-Sep-11	3,652	50	830					
MM23	1	5-Mar-02	9	11,105,300	330	41		12		
		11-Mar-02	15	8,871,700	410					
		18-Mar-02	22	5,140,100	410					
		2-Apr-02	37		400					
		29-Apr-02	64	200,500	590	9		4		
		17-Jun-02	113	147,700	510					
	SI	16-Sep-02	204	117,600	330	43		8		
		6-Jan-03	316	100,100	300			11		
		7-Jul-03	498	76,300	410					
		30-Sep-03	583	111,200	220					
		17-Nov-03	631	74,700	350					
		16-Feb-04	722	52,400	550			9		
		18-May-04	814	41,600	250					
		7-Jul-04	864		320					
		30-Nov-04	1,010	157,800	230					
		24-Jan-05	1,065	45,700	240			5		
		1-Aug-05	1,254	105,800	230					
		8-May-06	1,534	168,300	190			8		
		29-Jun-06	1,586							
		17-Jul-06	1,604	200	200					
		2-Oct-06	1,681	60	260					
		26-Feb-07	1,828	50	230					
		9-Jul-07	1,961	50	290					
		17-Dec-07	2,122	50	280					
		15-Apr-08	2,242	50	250					
		1-Sep-08	2,381	50	280					
		4-Dec-08	2,475	50	310					
		19-Mar-09	2,580	50	400					
		24-Aug-09	2,738	50	380		33			2
		25-Feb-10	2,923	50	350					
		17-Mar-11	3,308	50	380					
		19-Apr-12	3,707	50	380					
		2-Oct-12	3,873	50	600					
MM33	2	7-Jul-03	12	1,451,400	940	42		8		
		14-Jul-03	19	215,700	940	44				
		21-Jul-03	26	163,800	1,070	22				
		28-Jul-03	33	100,500	840	28				
	SI	4-Aug-03	40	129,800	810	29				
		2-Sep-03	69	147,400	1,000	19				
		29-Sep-03	96	62,200	860	14		4		
		12-Jan-04	201	80,000	770	8		8	2	
		6-Apr-04	286	83,200	740	13				
		20-Jul-04	391	31,200	670	21				
		29-Nov-04	523	43,500	710					
		7-Mar-05	621	65,100	830	20				
		13-Jun-05	719	83,200	640	7		7	1	
		26-Sep-05	824	42,600	670					
		27-Mar-06	1,006	72,100	660	5		7	2	
		19-Sep-06	1,182	41,800	740					
		19-Feb-07	1,335	105,200	510					
		5-Jun-07	1,441	131,000	600					
		5-Nov-07	1,594	30,000	440					
		11-Mar-08	1,721	110,000	480	9		9	2	
		12-Jun-08	1,814	23,000	390					
		24-Jul-08	1,856	180,000	350					
		19-Sep-08	1,913	110,000	340	22				
		15-Jan-09	2,031	28,000	240	19		15	1	
		16-Feb-09	2,063	330	330					
		23-Mar-09	2,098		640					
		23-Apr-09	2,129	50	470					
		17-Jul-09	2,214	50	460					
		6-Oct-09	2,295	50	560					
		26-Jan-10	2,407	50						
		23-Feb-10	2,435	50	640					
		16-Aug-10	2,609	50	680					
		15-Feb-11	2,792	50	810					
		13-Feb-12	3,155	50	810					
		23-Aug-12	3,347	50	780					
		15-Jan-13	3,492	50	720					
		7-Oct-13	3,757	50	770					
		13-Jan-14	3,855	50	1,130					
MM34	2	21-Jul-03	17	29,900	570	40		11		
		29-Jul-03	25	19,900	780					
		5-Aug-03	32	21,400	660					
		14-Aug-03	41	16,400	620					
		18-Aug-03	45	6,800	730					
		16-Sep-03	74	2,400	620	10		1		
		14-Oct-03	102	5,900	670					
		12-Jan-04	192	9,600	630	40		5		
		21-Jun-04	353	5,900	560	19				
		20-Sep-04	444	8,200	500					
		3-Mar-05	608	9,500	480					
		2-Aug-05	760	5,500	470	13		4		
		16-Feb-06	958		590					
		6-Apr-06	1,007	11,400	600			6		
		6-Feb-07	1,313	40,700	450	12		7		
		3-May-07	1,399	14,000	490			3		
		19-Feb-08	1,691	13,000	420			6		
		26-Mar-09	2,092		440					
		7-May-09	2,134		380					
		10-Aug-09	2,229	14,000	340			14		
		14-Sep-09	2,264							
		12-Oct-09	2,292		480					
		9-Nov-09	2,320	50	480					
		22-Feb-10	2,425	50	540					
		25-Oct-10	2,670	50	530					
		10-Jan-11	2,747	50	620					
		23-Jun-11	2,911							1
		3-Nov-11	3,044	50	890					
		7-Jun-12	3,261	50	780		38			2
		21-Feb-13	3,520	50	730					
MM39	1	21-Apr-04	3	2,203,800						
		23-Apr-04	5	350,600	610					
		26-Apr-04	8		400					
		29-Apr-04	11	1,508,000	680	36*		15*		
		11-May-04	23	6,700	490					
		25-May-04	37	7,400	520	21*				
		22-Jun-04	65	900	530					
		19-Jul-04	92	3,000	610	14*				
		2-Sep-04	137	8,400	580					
		14-Oct-04	179	7,000	510	17*		4*		
		13-Jan-05	270	13,400	580	19*				
		7-Apr-05	354	99,300	610	20*		15*	1	
		21-Jul-05	459	35,600	510	21*				
		13-Oct-05	543	15,300	580	21*				
		17-Jan-06	639	15,600	490	19*		8*	1	
		18-Jul-06	821	75,400	380	17*		7*		
		31-Oct-06	926	24,700	490					
		23-Jan-07	1,010	40,300	480					
		7-Aug-07	1,206	280,000	190	16*		13*	3	
		31-Aug-07	1,230	280,000	190					
		1-Nov-07	1,292	63,000	90					
		13-Nov-07	1,304							
		11-Dec-07	1,332	240	340					
		29-Jan-08	1,381	50	290					
		25-Apr-08	1,468	50	370					
		11-Jul-08	1,545	50	380					
		9-Jan-09	1,727	50	350					
		24-Apr-09	1,832	50	430					
		21-Aug-09	1,951	50	430					
MM40		21-Jun-04	8	350,100	290					
	3 or more	24-Jun-04	11	79,300	410	34		17	2	
		1-Jul-04	18	13,700	380					
		8-Jul-04	25	1,000	470					
		15-Jul-04	32	2,100	490					
		22-Jul-04	39	6,500	430					
		5-Aug-04	53	5,500	380					
		19-Aug-04	67	6,400	470					
		16-Sep-04	95	10,800	450	18		8		
		14-Dec-04	184	39,300	510					
		17-Mar-05	277	16,400	380					
		7-Jul-05	389	26,800	330					
		13-Oct-05	487	50,100	390					
		20-Jan-06	586	30,600	490					
		30-Jun-06	747	89,000	310	13		5	2	
		15-Oct-06	854	25,400	340					
		9-Feb-07	971	18,000	280					
		23-Aug-07	1,166	140,000	250	13		10		
		10-Jan-08	1,306	54,000	390					
		30-Jun-08	1,478		330					
		21-Aug-08	1,530	310,000	250	12		18	1	
		16-Oct-08	1,586		170					
		20-Oct-08	1,590	1,200,000						
		10-Nov-08	1,611							
		20-Jan-09	1,682	60	320					
		2-Mar-09	1,723	50	350					
		2-Jul-09	1,845	50	370					
		14-Jan-10	2,041	50	320					1
		7-Apr-10	2,124	50	460					
		16-Nov-10	2,347	50	440		33			
MM55		25-Sep-07	24	23,000	640					
	1	2-Oct-07	31	1,200	730	13			1	
		9-Oct-07	38	6,100	670					
		22-Oct-07	51	4,200	570	12			2 (1)	
		30-Oct-07	59	2,100	740					
		6-Nov-07	66	880	630					
		4-Dec-07	94	450	680					
		10-Jan-08	131	50	560					
		16-Apr-08	228	1,500	550					
		14-Aug-08	348	2,500	550	6			1	
		12-Mar-09	558	3,500	540					
		23-Jun-09	661	4,300	560	6			1	
		10-Dec-09	831	10,000		15			2	
		24-Feb-10	907		650					
		23-Aug-10	1,087	40,000	530					
		24-Mar-11	1,300	11,000	490	1			2	
		2-Oct-12	1,858	17,000	460	18			2	
		16-Apr-13	2,054	17,000	630				2 (1)	
MM62		17-Dec-08	16	2,200	700					
	1	23-Dec-08	22			11			3 (1)	
		27-Jan-09	57	680	1,130	2			2	
		13-Feb-09	74						2 (1)	
		25-Feb-09	86	270	1,000					
		31-Mar-09	120	190	1,240				3 (1)	
		4-Jun-09	185	2,200	880	1			2	
		1-Oct-09	304	520	860				1	
		11-Feb-10	437	410	820					
		20-Sep-10	658	860	900	1			1 (1)	
		5-Jan-12	1,130	1,100	1,090				2	
		24-Jul-12	1,331	20,000	1,200				2	
		7-Mar-13	1,557	11,000	1,200					
		2-Dec-14	2,192	5,200	980					
WEAU	1	30-May-90	-5	216,415	358	45*				
		31-May-90	-4			2*			2 (2)	
		4-Jun-90	0	355,184					2 (2)	
		7-Jun-90	3	355,360		44*				
		11-Jun-90	7	146,816	748					
		14-Jun-90	10			58*				
		18-Jun-90	14	100,877	568					
		24-Jun-90	20		972					
		28-Jun-90	24	34,737		30*			2 (1)	
		26-Jul-90	52	11,385					2 (2)	
		28-Sep-90	116	17,322		1*				
		13-Dec-90	192			29*				
		14-Feb-91	255		197					
		10-Jun-91	371	55,269	89	2*			2	
		6-Nov-91	520	94,474	14				2	
		24-Jan-92 †	599		43					
		3-May-92 †	699	61,667						
		25-Jun-92 †	752	55,900	30	1*			2	
		14-Jul-92 †	771	52,745					2	
		6-Oct-92 †	855		14					
		9-Feb-93 †	981						2 (2)	
		22-Feb-93 †	994		8	1*				
		16-Mar-93 †	1,016		6					
		13-Apr-93 †	1,044		7					
		19-May-93 †	1,080			1*				
		15-Jun-93 †	1,107		4					
		19-Jun-93 †	1,111			1*				
		24-Jul-93 †	1,146			1*				
		26-Jul-93 †	1,148		5					
		1-Jan-94 †	1,307		2					
		5-Jul-94 †	1,492		1					

[1] All subjects were men-who-have-sex-with-men (MSM) from the United Kingdom (MM) and the United States (WEAU), who were diagnosed with symptomatic primary subtype B infection and longitudinally followed before and after (shading) antiretroviral therapy.

[2] The number of transmitted founder (TF) viruses was inferred as previously described (Keele BF, et al,. PNAS, 2008) from single genome amplification (SGA) derived viral sequences from the first available plasma sample (Fig. S1); subjects MM14, MM23 amd MM33 were superinfected (SI) with additional subtype B strains at the timepoints indicated.

[3] Visit date; grey shading indicates time on suppressive antiretroviral therapy; subject WEAU received AZT monotherapy, which did not reduce viral loads (indicated by †).

[4] Days following onset of symptoms (DFOSx).

[5] Number of SGA derived 3' half genome or Env sequences amplified directly from plasma (Genbank accession number are listed in Table S 5); Env sequences for subjects MM39 and WEAU that have previously been reported (MM39, Wagh K, et al,. Cell Reports, 2018; WEAU, Wei X, et al,. Nature, 2003; Jones NA, et al,. JEM, 2004; Keele BF, et al,. PNAS, 2008; Salazar-Gonzalez J, et al,. JEM, 2009) are indicated by asterisks.

[6] Number of SGA derived 3' half genome or Env sequences amplified directly from peripheral blood mononucler cells (PBMCs) (Genbank accession number sre listed in Table S 5).

[7] Number of limiting dilution derived plasma isolates; all isolates were confirmed to be single virion derived by sequence analysis (Genbank accession number are listed in Table S 5).

[8] Number of conventional (bulk) plasma isolates; most isolates were sequenced and those that represent single virion derived strains are shown in parentheses (Genbank accession number are listed in Table S5).

[9] Number of limiting dilution derived outgrowth viruses from peripheral blood mononuclear cells (PBMCs); all isolates were confirmed to be single virion derived by sequence analysis (Genbank accession number are listed in Table S 5).

Table S

Table S2. Phenotypic analysis of virus isolates

Isolate ID[1]	Sequence ID[2]	DFOSx[3]	Replicative capacity (ng p24/ml)[4]	Tropism[5]	IFNα2 IC50 (pg/ml)[6]	IFNβ IC50 (pg/ml)[6]
MM14.02.2C3.bulk	MM14.PLAS.ISO.00040.003	40	1,148		0.639	8.160
MM14.02.2B4.bulk	MM14.PLAS.ISO.00040.002	40	899		0.682	8.666
MM14.02.2A1.bulk	MM14.PLAS.ISO.00040.001	40	924	R5	0.800	7.161
MM14.06.2B1.bulk	MM14.PLAS.ISO.00138.001	138	525		0.010	0.021
MM14.06.2B2.bulk	MM14.PLAS.ISO.00138.002	138	394		0.003	0.032
MM14.08.2B3.bulk	MM14.PLAS.ISO.00270.001	270	447		0.007	0.050
MM14.08.2B4.bulk	MM14.PLAS.ISO.00270.002	270	511		0.004	0.023
MM14.10.2C1.bulk	MM14.PLAS.ISO.00519.001	519	449		0.004	0.007
MM14.10.2C2.bulk	MM14.PLAS.ISO.00519.002	519	251	R5	0.006	0.001
MM14.12.1A1.bulk	MM14.PLAS.ISO.00722.001	722	414		0.015	0.060
MM14.12.1A2.bulk	MM14.PLAS.ISO.00722.002	722	476		0.019[7]	0.248[7]
MM14.14.1A1.bulk	MM14.PLAS.ISO.01045.001	1,045	273		0.007	0.006
MM14.14.1A2.bulk	MM14.PLAS.ISO.01045.002	1,045	215		0.007	0.003
MM14.16.1B1.bulk	MM14.PLAS.ISO.01324.001	1,324	688		0.028	0.133
MM14.16.1B2.bulk	MM14.PLAS.ISO.01324.002	1,324	725	R5	0.032[7]	0.128[7]
MM14.17.1B3.bulk	MM14.PLAS.ISO.01394.001	1,394	304		0.011	0.007
MM14.17.1B4.bulk	MM14.PLAS.ISO.01394.002	1,394	253	R5	0.011[7]	0.012[7]
MM14.23.1A3.VOA	MM14.PBMC.VOA.03193.001	3,193	347		0.029	0.067
MM15.02.2B5.bulk	MM15.PLAS.ISO.00027.002	27	876	Dual	0.577[7]	18.246[7]
MM15.02.2A2.bulk	MM15.PLAS.ISO.00027.001	27	904		0.523	20.371
MM15.02.2A4.bulk	MM15.PLAS.ISO.00027.003	27	489	Dual	0.582	25.291
MM15.03.2B6.bulk	MM15.PLAS.ISO.00037.002	37	729		0.412	18.431
MM15.03.2A3.bulk	MM15.PLAS.ISO.00037.001	37	571		0.439	14.984
MM15.03.1B2.bulk	MM15.PLAS.ISO.00037.003	37	387		0.407	19.592
MM15.03.2B1.bulk	MM15.PLAS.ISO.00037.004	37	389	Dual	0.273	21.927
MM15.06.2A1.bulk	MM15.PLAS.ISO.00079.001	79	603		0.326	14.380
MM15.07.2A3.bulk	MM15.PLAS.ISO.00107.001	107	1,317		0.489	15.166
MM15.08.2B1.bulk	MM15.PLAS.ISO.00191.001	191	668		0.194	7.782
MM15.11.2B4.bulk	MM15.PLAS.ISO.00373.001	373	645	R5	0.153	3.676
MM15.13.2C1.bulk	MM15.PLAS.ISO.00548.001	548	879	R5	0.247[7]	9.677[7]
MM15.14.2C3.bulk	MM15.PLAS.ISO.00720.001	720	589	R5	0.224	9.385
MM15.16.1B2.VOA	MM15.PBMC.VOA.01403.001	1,403	467		0.332	11.236
MM23.01.2A3	MM23.PLAS.ISO.00009.011	9	142		1.114	
MM23.01.2C2	MM23.PLAS.ISO.00009.012	9	186	R5	0.925	
MM23.01.11A3	MM23.PLAS.ISO.00009.001	9	283		0.635	
MM23.01.11A6	MM23.PLAS.ISO.00009.002	9	249		0.784[7]	
MM23.01.11B5	MM23.PLAS.ISO.00009.003	9	232		0.730	
MM23.01.11C4	MM23.PLAS.ISO.00009.004	9	168		0.765[7]	
MM23.01.13A4	MM23.PLAS.ISO.00009.005	9	321		0.708[7]	
MM23.01.13A5	MM23.PLAS.ISO.00009.006	9	331		0.614	17.458
MM23.01.13B3	MM23.PLAS.ISO.00009.007	9	524		0.735	15.166
MM23.01.13C2	MM23.PLAS.ISO.00009.008	9	960		1.189	15.293
MM23.01.13D2	MM23.PLAS.ISO.00009.009	9	926		0.891	14.955
MM23.01.14D5	MM23.PLAS.ISO.00009.010	9	1,392		0.673	
MM23.05.2C1	MM23.PLAS.ISO.00064.004	64	245	R5	0.542	14.380
MM23.05.14B3	MM23.PLAS.ISO.00064.001	64	591		0.356	10.750
MM23.05.14C3	MM23.PLAS.ISO.00064.002	64	218		0.389	11.426
MM23.05.14D2	MM23.PLAS.ISO.00064.003	64	317		0.355	8.262
MM23.07.1C3	MM23.PLAS.ISO.00204.001	204	499		0.042	
MM23.07.2A2	MM23.PLAS.ISO.00204.002	204	119		0.048	
MM23.07.2A4	MM23.PLAS.ISO.00204.003	204	151		0.083	0.181
MM23.07.2A6	MM23.PLAS.ISO.00204.004	204	292		0.191	1.766
MM23.07.2B2	MM23.PLAS.ISO.00204.005	204	177	R5	0.029	2.090
MM23.07.2B3	MM23.PLAS.ISO.00204.006	204	100		0.257	
MM23.07.2B5	MM23.PLAS.ISO.00204.007	204	526	R5	0.007	0.186
MM23.07.2C6	MM23.PLAS.ISO.00204.008	204	397		0.187	
MM23.08.13C6	MM23.PLAS.ISO.00316.001	316	168		0.006	0.013
MM23.08.21B6	MM23.PLAS.ISO.00316.004	316	362		0.004	
MM23.08.21C2	MM23.PLAS.ISO.00316.005	316	144		0.003	0.006
MM23.08.22A3	MM23.PLAS.ISO.00316.006	316	434		0.003	0.006
MM23.08.22B4	MM23.PLAS.ISO.00316.007	316	477		0.004	
MM23.08.22B5	MM23.PLAS.ISO.00316.008	316	431		0.002	0.002
MM23.08.22C6	MM23.PLAS.ISO.00316.009	316	427	R5	0.003	
MM23.11.1A1	MM23.PLAS.ISO.00722.001	722	291		0.007	
MM23.11.1A5	MM23.PLAS.ISO.00722.002	722	358		0.002	0.006
MM23.11.1C3	MM23.PLAS.ISO.00722.003	722	361		0.004	
MM23.11.1D3	MM23.PLAS.ISO.00722.004	722	157		0.002	0.007
MM23.11.1D4	MM23.PLAS.ISO.00722.005	722	165		0.002	0.004
MM23.11.1D6	MM23.PLAS.ISO.00722.006	722	128		0.002	0.008
MM23.11.2B2	MM23.PLAS.ISO.00722.007	722	403		0.008[7]	
MM23.11.2B3	MM23.PLAS.ISO.00722.008	722	268		0.006[7]	
MM23.11.2C2	MM23.PLAS.ISO.00722.009	722	290		0.009	
MM23.12.21B1	MM23.PLAS.ISO.01065.001	1,065	300		0.023	0.011
MM23.12.22A3	MM23.PLAS.ISO.01065.002	1,065	284		0.033	0.023
MM23.12.22C1	MM23.PLAS.ISO.01065.003	1,065	231		0.026	0.073
MM23.12.22C6	MM23.PLAS.ISO.01065.004	1,065	323		0.032	0.041
MM23.13.1B4	MM23.PLAS.ISO.01534.001	1,534	335		0.068[7]	
MM23.13.2D1	MM23.PLAS.ISO.01534.008	1,534	157		0.053[7]	0.246
MM23.13.21A3	MM23.PLAS.ISO.01534.002	1,534	290		0.045[7]	
MM23.13.21B5	MM23.PLAS.ISO.01534.003	1,534	374		0.040[7]	0.130
MM23.13.21B6	MM23.PLAS.ISO.01534.004	1,534	272		0.052	0.256
MM23.13.21D4	MM23.PLAS.ISO.01534.005	1,534	284		0.038	
MM23.13.22B3	MM23.PLAS.ISO.01534.006	1,534	302	R5	0.050	
MM23.13.22C5	MM23.PLAS.ISO.01534.007	1,534	427		0.027	0.064
MM23.18.1A1.VOA	MM23.PBMC.VOA.02738.001	2,738	354		0.059	0.099
MM23.18.2A1.VOA	MM23.PBMC.VOA.02738.002	2,738	284		0.044	0.046
MM33.01.1C1	MM33.PLAS.ISO.00012.007	12	418		0.734[7]	
MM33.01.13C1	MM33.PLAS.ISO.00012.001	12	1,013		0.820	13.488
MM33.01.14C4	MM33.PLAS.ISO.00012.002	12	558		0.394[7]	7.507
MM33.01.16A5	MM33.PLAS.ISO.00012.003	12	582	R5	0.744[7]	9.406
MM33.01.16C3	MM33.PLAS.ISO.00012.004	12	1,035		0.739	
MM33.01.18A5	MM33.PLAS.ISO.00012.005	12	552		0.581[7]	
MM33.01.19C4	MM33.PLAS.ISO.00012.006	12	91		0.419[7]	6.764
MM33.01.20D1	MM33.PLAS.ISO.00012.008	12	1,020		0.295	
MM33.TF_IMC		12	614		0.590[7]	10.962[7]
MM33.07.1A2	MM33.PLAS.ISO.00096.001	96	471		0.150[7]	4.223
MM33.07.1B6	MM33.PLAS.ISO.00096.002	96	137		0.093[7]	3.217
MM33.07.1D4	MM33.PLAS.ISO.00096.003	96	367		0.133[7]	0.612
MM33.07.2D2	MM33.PLAS.ISO.00096.004	96	757		0.147[7]	2.419
MM33.08.1A2	MM33.PLAS.ISO.00201.001	201	390	R5	0.019[7]	0.047
MM33.08.1A3	MM33.PLAS.ISO.00201.002	201	372		0.050[7]	0.047
MM33.08.1A4	MM33.PLAS.ISO.00201.003	201	320		0.045[7]	
MM33.08.1D2	MM33.PLAS.ISO.00201.004	201	312		0.012[7]	0.012
MM33.08.1D4	MM33.PLAS.ISO.00201.005	201	533		0.057[7]	0.061
MM33.08.1D5	MM33.PLAS.ISO.00201.006	201	791		0.043[7]	
MM33.08.2A3	MM33.PLAS.ISO.00201.007	201	436		0.018[7]	
MM33.08.2B6	MM33.PLAS.ISO.00201.008	201	587		0.043[7]	0.052
MM33.08.1A4.bulk	MM33.PLAS.ISO.00201.009	201	313		0.030	0.031
MM33.08.1A3.bulk	MM33.PLAS.ISO.00201.010	201	344		0.025	0.016
MM33.13.1D3	MM33.PLAS.ISO.00719.004	719	681		0.008	0.006
MM33.13.1D6	MM33.PLAS.ISO.00719.005	719	244		0.004[7]	
MM33.13.2A4	MM33.PLAS.ISO.00719.006	719	507		0.004	0.003
MM33.13.2D6	MM33.PLAS.ISO.00719.007	719	174		0.005[7]	0.006
MM33.13.11B1	MM33.PLAS.ISO.00719.001	719	608		0.003	0.002
MM33.13.11B5	MM33.PLAS.ISO.00719.002	719	684		0.009	
MM33.13.12A4	MM33.PLAS.ISO.00719.003	719	598		0.003	
MM33.13.1.bulk	MM33.PLAS.ISO.00719.008	719	121		0.003	0.006
MM33.13_IMC		719	734		0.008[7]	0.006[7]
MM33.14.11A3	MM33.PLAS.ISO.01006.001	1,006	682		0.009[7]	0.004
MM33.14.11B1	MM33.PLAS.ISO.01006.002	1,006	682		0.005	
MM33.14.11B4	MM33.PLAS.ISO.01006.003	1,006	645		0.004	
MM33.14.11C6	MM33.PLAS.ISO.01006.004	1,006	690		0.004	
MM33.14.12A2	MM33.PLAS.ISO.01006.005	1,006	580		0.004	0.008
MM33.14.12A4	MM33.PLAS.ISO.01006.006	1,006	559		0.004[7]	0.009
MM33.14.12C6	MM33.PLAS.ISO.01006.007	1,006	639		0.005[7]	0.008
MM33.14.1A1.bulk	MM33.PLAS.ISO.01006.008	1,006	106		0.004	0.014
MM33.14.1A2.bulk	MM33.PLAS.ISO.01006.009	1,006	536		0.003	0.012
MM33.17.1D2	MM33.PLAS.ISO.01721.009	1,721	493		0.019	0.005
MM33.17.1D6	MM33.PLAS.ISO.01721.001	1,721	260		0.014	0.017
MM33.17.2A4	MM33.PLAS.ISO.01721.002	1,721	639		0.017[7]	0.015
MM33.17.2B3	MM33.PLAS.ISO.01721.003	1,721	140		0.019[7]	
MM33.17.2B4	MM33.PLAS.ISO.01721.004	1,721	59		0.028[7]	0.007
MM33.17.2B5	MM33.PLAS.ISO.01721.005	1,721	114		0.017[7]	
MM33.17.2C3	MM33.PLAS.ISO.01721.006	1,721	50		0.009	
MM33.17.2D4	MM33.PLAS.ISO.01721.007	1,721	356		0.029[7]	0.003
MM33.17.2D5	MM33.PLAS.ISO.01721.008	1,721	484		0.008	0.006
MM33.17.1A1.bulk	MM33.PLAS.ISO.01721.010	1,721	381		0.031	0.022
MM33.17.1A2.bulk	MM33.PLAS.ISO.01721.011	1,721	615		0.040	0.019
MM33.17_IMC		1,721	244		0.064[7]	0.065[7]
MM33.19.1A2	MM33.PLAS.ISO.02031.001	2,031	565		0.015	
MM33.19.1A4	MM33.PLAS.ISO.02031.002	2,031	331	R5	0.018	
MM33.19.1B1	MM33.PLAS.ISO.02031.003	2,031	616		0.017	
MM33.19.1C2	MM33.PLAS.ISO.02031.004	2,031	274		0.011	0.089
MM33.19.2A4	MM33.PLAS.ISO.02031.005	2,031	244		0.027	0.047
MM33.19.2B1	MM33.PLAS.ISO.02031.006	2,031	224		0.016	0.028
MM33.19.2B5	MM33.PLAS.ISO.02031.007	2,031	689		0.010	0.133
MM33.19.2C1	MM33.PLAS.ISO.02031.008	2,031	621		0.018	
MM33.19.2D2	MM33.PLAS.ISO.02031.009	2,031	591		0.032	
MM33.19.3A1	MM33.PLAS.ISO.02031.010	2,031	220		0.036	
MM33.19.3B4	MM33.PLAS.ISO.02031.011	2,031	242		0.035	
MM33.19.3D2	MM33.PLAS.ISO.02031.012	2,031	551		0.024	
MM33.19.4A5	MM33.PLAS.ISO.02031.013	2,031	149		0.022	
MM33.19.4B5	MM33.PLAS.ISO.02031.014	2,031	655		0.033	
MM33.19.4D1	MM33.PLAS.ISO.02031.015	2,031	628	R5	0.046	
MM33.19.1B1.bulk	MM33.PLAS.ISO.02031.016	2,031	267		0.029	0.057
MM34.01.1A5	MM34.PLAS.ISO.00017.002	17	176		0.518	9.675
MM34.01.1B3	MM34.PLAS.ISO.00017.003	17	154		0.425	17.497
MM34.01.1B6	MM34.PLAS.ISO.00017.004	17	279		0.485	
MM34.01.1C2	MM34.PLAS.ISO.00017.001	17	135		1.485	17.631
MM34.01.1D1	MM34.PLAS.ISO.00017.006	17	128	R5	1.094	
MM34.01.2A4	MM34.PLAS.ISO.00017.007	17	237		0.725	
MM34.01.2B3	MM34.PLAS.ISO.00017.008	17	343		0.386	
MM34.01.2C2	MM34.PLAS.ISO.00017.009	17	200		0.944	18.025
MM34.01.2D4	MM34.PLAS.ISO.00017.010	17	218		0.691	
MM34.01.2D5	MM34.PLAS.ISO.00017.011	17	503		0.821	
MM34.06.21C6	MM34.PLAS.ISO.00074.001	74	266		0.478	10.531
MM34.08.11B5	MM34.PLAS.ISO.00192.001	192	392		0.032[7]	0.168[7]
MM34.08.11C2	MM34.PLAS.ISO.00192.002	192	439		0.037[7]	3.350[7]
MM34.08.11D3	MM34.PLAS.ISO.00192.004	192	409		0.04	3.475[7]
MM34.08.21A3	MM34.PLAS.ISO.00192.005	192	624		0.025	2.088[7]
MM34.12.21A1	MM34.PLAS.ISO.00760.001	760	340		0.026	0.035
MM34.12.21C5	MM34.PLAS.ISO.00760.002	760	236		0.012	0.021
MM34.12.21D1	MM34.PLAS.ISO.00760.003	760	59		0.030	0.049
MM34.12.21D3	MM34.PLAS.ISO.00760.004	760	100		0.028	0.030
MM34.13.11A1	MM34.PLAS.ISO.01007.001	1,007	66		0.005	0.004
MM34.13.11A2	MM34.PLAS.ISO.01007.002	1,007	268		0.006	
MM34.13.11B1	MM34.PLAS.ISO.01007.003	1,007	154		0.004	0.001
MM34.13.11C5	MM34.PLAS.ISO.01007.004	1,007	640		0.017	0.002
MM34.13.11D2	MM34.PLAS.ISO.01007.005	1,007	143		0.002	0.001
MM34.13.11D5	MM34.PLAS.ISO.01007.006	1,007	214	R5	0.007	
MM34.14.1A4	MM34.PLAS.ISO.01313.001	1,313	482		0.072	
MM34.14.1B2	MM34.PLAS.ISO.01313.002	1,313	389		0.018	
MM34.14.1B3	MM34.PLAS.ISO.01313.003	1,313	354		0.062	0.060
MM34.14.1C6	MM34.PLAS.ISO.01313.004	1,313	646		0.036	
MM34.14.1D4	MM34.PLAS.ISO.01313.005	1,313	478		0.022	0.124
MM34.14.2A1	MM34.PLAS.ISO.01313.006	1,313	596		0.041[7]	0.326[7]
MM34.14.2B1	MM34.PLAS.ISO.01313.007	1,313	153			0.050
MM34.15.11A1	MM34.PLAS.ISO.01399.001	1,399	188		0.007	0.004
MM34.15.11C1	MM34.PLAS.ISO.01399.002	1,399	242		0.008	0.001
MM34.15.11D3	MM34.PLAS.ISO.01399.003	1,399	384		0.004[7]	0.001[7]
MM34.16.11A5	MM34.PLAS.ISO.01691.002	1,691	414		0.017	0.052
MM34.16.11C1	MM34.PLAS.ISO.01691.003	1,691	278		0.048	0.035
MM34.16.11C3	MM34.PLAS.ISO.01691.004	1,691	591		0.032	
MM34.16.11D1	MM34.PLAS.ISO.01691.005	1,691	413		0.026	0.045
MM34.16.11D2	MM34.PLAS.ISO.01691.006	1,691	255		0.056	0.019
MM34.18.1A4	MM34.PLAS.ISO.02229.003	2,229	619		0.072	
MM34.18.1A6	MM34.PLAS.ISO.02229.004	2,229	588		0.088	0.139
MM34.18.1C5	MM34.PLAS.ISO.02229.006	2,229	232		0.098	
MM34.18.2A4	MM34.PLAS.ISO.02229.009	2,229	274	R5	0.058	0.466
MM34.18.2A6	MM34.PLAS.ISO.02229.010	2,229	102		0.106	0.490
MM34.18.2C2	MM34.PLAS.ISO.02229.011	2,229	258		0.052	
MM34.18.2D1	MM34.PLAS.ISO.02229.013	2,229	118		0.073	
MM34.18.2D2	MM34.PLAS.ISO.02229.014	2,229	276	R5	0.062	0.429
MM34.23.1B2.VOA	MM34.PBMC.VOA.02911.001	2,911	392		0.059	0.150
MM34.25.3A5.VOA	MM34.PBMC.VOA.03261.002	3,261	303		0.033	0.204
MM34.25.2B5.VOA	MM34.PBMC.VOA.03261.001	3,261	254		0.026	0.162
MM39.02.1B4	MM39.PLAS.ISO.00011.001	11	424		0.584[7]	14.857
MM39.02.2A2	MM39.PLAS.ISO.00011.002	11	180		0.756[7]	
MM39.02.2B5	MM39.PLAS.ISO.00011.003	11	276	R5	0.700[7]	
MM39.02.13B5	MM39.PLAS.ISO.00011.004	11	437		0.799[7]	
MM39.02.13C3	MM39.PLAS.ISO.00011.005	11	326		0.796[7]	
MM39.02.13D2	MM39.PLAS.ISO.00011.006	11	275		0.631[7]	9.659
MM39.02.13D3	MM39.PLAS.ISO.00011.007	11	249		0.620	
MM39.02.13D6	MM39.PLAS.ISO.00011.008	11	453		0.731[7]	
MM39.02.14C1	MM39.PLAS.ISO.00011.010	11	637		0.897[7]	
MM39.02.14C2	MM39.PLAS.ISO.00011.011	11	566		0.787[7]	
MM39.02.14C3	MM39.PLAS.ISO.00011.012	11	828		0.767[7]	17.371
MM39.02.14C5	MM39.PLAS.ISO.00011.013	11	758		0.652[7]	15.713
MM39.02.14D4	MM39.PLAS.ISO.00011.014	11	132		0.929[7]	
MM39.02.14D5	MM39.PLAS.ISO.00011.015	11	228		0.850[7]	
MM39.07.11A3	MM39.PLAS.ISO.00179.001	179	288		0.104[7]	5.980
MM39.07.11A4	MM39.PLAS.ISO.00179.002	179	178		0.042	4.497
MM39.07.11C1	MM39.PLAS.ISO.00179.003	179	117		0.185[7]	3.633
MM39.07.11C2	MM39.PLAS.ISO.00179.004	179	195		0.140[7]	6.435
MM39.10.11B3	MM39.PLAS.ISO.00354.001	354	94		0.007[7]	
MM39.10.11B4	MM39.PLAS.ISO.00354.002	354	298	R5	0.007[7]	
MM39.10.11D1	MM39.PLAS.ISO.00354.003	354	415		0.006[7]	
MM39.10.11D4	MM39.PLAS.ISO.00354.004	354	198		0.004[7]	0.148
MM39.10.11D6	MM39.PLAS.ISO.00354.005	354	129		0.007	
MM39.10.12A2	MM39.PLAS.ISO.00354.006	354	127		0.007	
MM39.10.12A6	MM39.PLAS.ISO.00354.007	354	143		0.003	
MM39.10.12B5	MM39.PLAS.ISO.00354.008	354	91		0.007	
MM39.10.12C3	MM39.PLAS.ISO.00354.009	354	121		0.004	
MM39.10.12C4	MM39.PLAS.ISO.00354.010	354	130		0.005[7]	0.137[7]
MM39.10.12D3	MM39.PLAS.ISO.00354.011	354	271		0.008	0.114
MM39.10.12D4	MM39.PLAS.ISO.00354.012	354	80		0.005	
MM39.10.14A3	MM39.PLAS.ISO.00354.015	354	295		0.003	
MM39.10.14B4	MM39.PLAS.ISO.00354.013	354	86		0.007	0.079
MM39.10.14C5	MM39.PLAS.ISO.00354.014	354	206		0.005	
MM39.10.1C1.bulk	MM39.PLAS.ISO.00354.016	354	121		0.004[7]	0.214[7]
MM39.13.1B1	MM39.PLAS.ISO.00639.001	639	594		0.008	0.030
MM39.13.11A2	MM39.PLAS.ISO.00639.002	639	180		0.006	
MM39.13.11A4	MM39.PLAS.ISO.00639.003	639	349		0.007	
MM39.13.11B1	MM39.PLAS.ISO.00639.004	639	188		0.005	
MM39.13.11B2	MM39.PLAS.ISO.00639.008	639	124		0.007	0.007
MM39.13.11C3	MM39.PLAS.ISO.00639.005	639	379		0.006	0.031
MM39.13.11C5	MM39.PLAS.ISO.00639.006	639	167		0.010	0.023
MM39.13.11D1	MM39.PLAS.ISO.00639.007	639	247		0.005	
MM39.13.1C3.bulk	MM39.PLAS.ISO.00639.009	639	66		0.003	0.022
MM39.14.1A2	MM39.PLAS.ISO.00821.001	821	107		0.042	0.005
MM39.14.1A5	MM39.PLAS.ISO.00821.002	821	339		0.040	0.004
MM39.14.1B3	MM39.PLAS.ISO.00821.003	821	547		0.039	
MM39.14.2A3	MM39.PLAS.ISO.00821.004	821	233		0.026	
MM39.14.2B1	MM39.PLAS.ISO.00821.005	821	455		0.035[7]	0.006[7]
MM39.14.2B5	MM39.PLAS.ISO.00821.007	821	318		0.023	0.020
MM39.14.2D4	MM39.PLAS.ISO.00821.006	821	93		0.022	
MM39.16.1A4	MM39.PLAS.ISO.01206.002	1,206	189		0.009	
MM39.16.1B2	MM39.PLAS.ISO.01206.003	1,206	239	R5	0.024[7]	0.200
MM39.16.1B4	MM39.PLAS.ISO.01206.004	1,206	167		0.017[7]	0.121
MM39.16.1C4	MM39.PLAS.ISO.01206.005	1,206	107		0.016[7]	0.123
MM39.16.2A5	MM39.PLAS.ISO.01206.006	1,206	172		0.022[7]	0.192
MM39.16.2C3	MM39.PLAS.ISO.01206.001	1,206	539		0.020[7]	
MM39.16.2D2	MM39.PLAS.ISO.01206.007	1,206	635	R5	0.018[7]	
MM39.16.13A2	MM39.PLAS.ISO.01206.013	1,206	426		0.068	
MM39.16.13A5	MM39.PLAS.ISO.01206.008	1,206	113		0.037	0.291
MM39.16.13B1	MM39.PLAS.ISO.01206.009	1,206	117		0.059	0.216
MM39.16.13B3	MM39.PLAS.ISO.01206.010	1,206	270		0.020	
MM39.16.14B3	MM39.PLAS.ISO.01206.011	1,206	183		0.023	
MM39.16.14C1	MM39.PLAS.ISO.01206.012	1,206	617		0.010	0.123
MM39.16.1A1.bulk	MM39.PLAS.ISO.01206.014	1,206	80		0.010	0.205
MM39.16.1A2.bulk	MM39.PLAS.ISO.01206.015	1,206	493		0.041	0.669
MM39.16.1A3.bulk	MM39.PLAS.ISO.01206.016	1,206	628		0.046	0.349
MM40.01.1A1	MM40.PLAS.ISO.00011.001	11	518		0.712[7]	5.287
MM40.01.1A2	MM40.PLAS.ISO.00011.002	11	736		0.741[7]	
MM40.01.1A4	MM40.PLAS.ISO.00011.003	11	557		0.736[7]	
MM40.01.1A5	MM40.PLAS.ISO.00011.004	11	709		0.722	
MM40.01.1A6	MM40.PLAS.ISO.00011.005	11	654		0.782	
MM40.01.1B1	MM40.PLAS.ISO.00011.006	11	315		0.723[7]	5.738
MM40.01.1B2	MM40.PLAS.ISO.00011.007	11	727	R5	0.999	
MM40.01.1B3	MM40.PLAS.ISO.00011.008	11	532		0.653	
MM40.01.1B4	MM40.PLAS.ISO.00011.009	11	132		0.233	
MM40.01.1B5	MM40.PLAS.ISO.00011.010	11	685	R5	0.627	
MM40.01.1C6	MM40.PLAS.ISO.00011.011	11	538		0.528	
MM40.01.1D1	MM40.PLAS.ISO.00011.012	11	484		0.652	
MM40.01.2A4	MM40.PLAS.ISO.00011.013	11	629		0.821	
MM40.01.2B5	MM40.PLAS.ISO.00011.014	11	312		0.679	
MM40.01.2C2	MM40.PLAS.ISO.00011.015	11	366		0.681	7.361
MM40.01.2D4	MM40.PLAS.ISO.00011.016	11	657		0.722	7.624
MM40.01.2D5	MM40.PLAS.ISO.00011.017	11	417		0.782	
MM40.01.2A1.bulk	MM40.PLAS.ISO.00011.018	11	1,254		0.732	11.993
MM40.01.2A2.bulk	MM40.PLAS.ISO.00011.019	11	583		0.394	13.197
MM40.07.11A3	MM40.PLAS.ISO.00095.004	95	421		0.429	1.899
MM40.07.11A4	MM40.PLAS.ISO.00095.001	95	319		0.590	
MM40.07.11B1	MM40.PLAS.ISO.00095.002	95	314		0.750	
MM40.07.11B3	MM40.PLAS.ISO.00095.005	95	387		0.701	
MM40.07.11B4	MM40.PLAS.ISO.00095.003	95	287		0.149	
MM40.07.11B5	MM40.PLAS.ISO.00095.006	95	266		0.208	1.598
MM40.07.11C1	MM40.PLAS.ISO.00095.008	95	200		0.120	2.256
MM40.07.12B1	MM40.PLAS.ISO.00095.007	95	233		0.154	2.568
MM40.12.13A6	MM40.PLAS.ISO.00747.001	747	166		0.006	0.008
MM40.12.13C1	MM40.PLAS.ISO.00747.002	747	176		0.002	0.012
MM40.12.13D1	MM40.PLAS.ISO.00747.003	747	178	R5	0.004	
MM40.12.14C5	MM40.PLAS.ISO.00747.004	747	192		0.006[7]	0.006
MM40.12.14D2	MM40.PLAS.ISO.00747.005	747	219		0.006[7]	0.007
MM40.12.1A1.bulk	MM40.PLAS.ISO.00747.006	747	267		0.010	0.011
MM40.12.1A2.bulk	MM40.PLAS.ISO.00747.007	747	529		0.003	0.011
MM40.13.11A1	MM40.PLAS.ISO.01166.002	1,166	289		0.009[7]	
MM40.13.11A5	MM40.PLAS.ISO.01166.003	1,166	237		0.017[7]	
MM40.13.11B3	MM40.PLAS.ISO.01166.004	1,166	208		0.008[7]	
MM40.13.11D4	MM40.PLAS.ISO.01166.005	1,166	238		0.011[7]	0.017
MM40.13.12A1	MM40.PLAS.ISO.01166.006	1,166	182		0.007[7]	0.025
MM40.13.12B2	MM40.PLAS.ISO.01166.007	1,166	189		0.006[7]	0.009
MM40.13.12B5	MM40.PLAS.ISO.01166.008	1,166	195		0.009[7]	
MM40.13.12C2	MM40.PLAS.ISO.01166.009	1,166	263		0.010[7]	0.010
MM40.13.12C3	MM40.PLAS.ISO.01166.010	1,166	251		0.006[7]	
MM40.13.13D5	MM40.PLAS.ISO.01166.001	1,166	162		0.028[7]	0.008
MM40.15.1A3	MM40.PLAS.ISO.01530.001	1,530	192		0.048[7]	
MM40.15.1A5	MM40.PLAS.ISO.01530.002	1,530	241		0.032[7]	
MM40.15.1B1	MM40.PLAS.ISO.01530.003	1,530	230		0.025[7]	0.034
MM40.15.1B6	MM40.PLAS.ISO.01530.004	1,530	251		0.042	
MM40.15.1C1	MM40.PLAS.ISO.01530.005	1,530	423		0.067[7]	
MM40.15.2A2	MM40.PLAS.ISO.01530.006	1,530	126		0.043[7]	
MM40.15.2B1	MM40.PLAS.ISO.01530.007	1,530	257		0.051[7]	
MM40.15.2B5	MM40.PLAS.ISO.01530.008	1,530	247		0.025[7]	
MM40.15.2B6	MM40.PLAS.ISO.01530.009	1,530	606		0.033[7]	
MM40.15.2C1	MM40.PLAS.ISO.01530.010	1,530	235		0.009[7]	0.031
MM40.15.2C3	MM40.PLAS.ISO.01530.011	1,530	465	R5	0.069[7]	0.084
MM40.15.2D1	MM40.PLAS.ISO.01530.012	1,530	290		0.042[7]	
MM40.15.2D6	MM40.PLAS.ISO.01530.013	1,530	267	R5	0.048[7]	0.035
MM40.15.13B6	MM40.PLAS.ISO.01530.014	1,530	217		0.041	
MM40.15.13C1	MM40.PLAS.ISO.01530.018	1,530	210		0.043	
MM40.15.14B3	MM40.PLAS.ISO.01530.015	1,530	212		0.061	0.159
MM40.15.14C3	MM40.PLAS.ISO.01530.016	1,530	273		0.034	
MM40.15.14D5	MM40.PLAS.ISO.01530.017	1,530	175		0.029	
MM40.15.1.bulk	MM40.PLAS.ISO.01530.020	1,530	144		0.090	0.271
MM40.18.1C7.VOA	MM40.PBMC.VOA.02041.001	2,041	373		0.030	0.066
MM55.01.1A3.bulk	MM55.PLAS.ISO.00031.001	31	210	R5	0.019[7]	0.108[7]
MM55.03.2B4.bulk	MM55.PLAS.ISO.00051.002	51	265		0.021[7]	0.073[7]
MM55.03.2A1.bulk	MM55.PLAS.ISO.00051.001	51	310		0.081[7]	0.422[7]
MM55.09.2A1.bulk	MM55.PLAS.ISO.00348.001	348	184		0.008	0.074
MM55.11.2A3.bulk	MM55.PLAS.ISO.00661.001	661	133	Dual	0.002	0.007
MM55.12.2B1.bulk	MM55.PLAS.ISO.00831.001	831	174		0.005[7]	0.029[7]
MM55.12.2B2.bulk	MM55.PLAS.ISO.00831.002	831	181		0.007	0.011
MM55.14.1B4.bulk	MM55.PLAS.ISO.01300.003	1,300	475		0.003	0.010
MM55.14.2B5.bulk	MM55.PLAS.ISO.01300.001	1,300	477		0.003	0.010
MM55.15.1A3.bulk	MM55.PLAS.ISO.01858.001	1,858	222	R5	0.007	0.009
MM55.15.1A4.bulk	MM55.PLAS.ISO.01858.002	1,858	209	R5	0.005	0.047
MM55.16.1C2.bulk	MM55.PLAS.ISO.02054.001	2,054	402		0.006	0.006
MM55.16.1E1.bulk	MM55.PLAS.ISO.02054.002	2,054	513		0.007	0.004
MM62.01.1A3.bulk	MM62.PLAS.ISO.00022.003	22	404	R5	0.200[7]	1.723[7]
MM62.01.1C4.bulk	MM62.PLAS.ISO.00022.001	22	227		0.160	1.614
MM62.01.2C6.bulk	MM62.PLAS.ISO.00022.002	22	238		0.260	1.808
MM62.02.1B1.bulk	MM62.PLAS.ISO.00057.002	57	296		0.090	0.751
MM62.02.2D1.bulk	MM62.PLAS.ISO.00057.001	57	223		0.081	0.871
MM62.03.1B3.bulk	MM62.PLAS.ISO.00074.001	74	255		0.008	0.014
MM62.03.2D2.bulk	MM62.PLAS.ISO.00074.002	74	245		0.010	0.022
MM62.04.1C1.bulk	MM62.PLAS.ISO.00120.001	120	298		0.005[7]	0.004[7]
MM62.04.1D3.bulk	MM62.PLAS.ISO.00120.002	120	243		0.007	0.008
MM62.04.1E5.bulk	MM62.PLAS.ISO.00120.003	120	279		0.007	0.008
MM62.05.2C1.bulk	MM62.PLAS.ISO.00185.001	185	358		0.016[7]	0.021[7]
MM62.05.2D5.bulk	MM62.PLAS.ISO.00185.002	185	374		0.030	0.079
MM62.06.1C3.bulk	MM62.PLAS.ISO.00304.001	304	267		0.006	0.007
MM62.08.2A1.bulk	MM62.PLAS.ISO.00658.001	658	362	R5	0.009	0.011
MM62.10.1D6.bulk	MM62.PLAS.ISO.01130.001	1,130	258		0.012	0.022
MM62.10.1G6.bulk	MM62.PLAS.ISO.01130.002	1,130	246		0.014	0.018
MM62.11.2B5.bulk	MM62.PLAS.ISO.01331.001	1,331	298	R5	0.010	0.016
MM62.11.2A2.bulk	MM62.PLAS.ISO.01331.002	1,331	307	R5	0.015	0.022
WEAU.02.1A1.bulk	WEAU.PLAS.ISO.-0004.001	-4	257	Dual	0.843	19.873
WEAU.02.1A2.bulk	WEAU.PLAS.ISO.-0004.002	-4	464	Dual	0.854	20.646
WEAU.03.1A4.bulk	WEAU.PLAS.ISO.00000.001	0	260		1.006	18.580
WEAU.03.1A5.bulk	WEAU.PLAS.ISO.00000.002	0	146	Dual	0.972	17.459
WEAU.08.1B1.bulk	WEAU.PLAS.ISO.00024.001	24	283		0.302	9.336
WEAU.08.1B2.bulk	WEAU.PLAS.ISO.00024.002	24	295		0.298	8.530
WEAU.11.1B5.bulk	WEAU.PLAS.ISO.00052.001	52	228	Dual	0.264	6.061
WEAU.11.1B6.bulk	WEAU.PLAS.ISO.00052.002	52	287		0.215	4.924
WEAU.14.1C1.bulk	WEAU.PLAS.ISO.00371.001	371	306		0.151[7]	7.139[7]
WEAU.14.1C3.bulk	WEAU.PLAS.ISO.00371.002	371	158		0.302	4.073
WEAU.15.1C4.bulk	WEAU.PLAS.ISO.00520.001	520	140		0.266	8.100
WEAU.15.1C5.bulk	WEAU.PLAS.ISO.00520.002	520	121	R5	0.333	8.758
WEAU.17.1D1.bulk	WEAU.PLAS.ISO.00752.001	752	146		0.298	11.100
WEAU.17.1D2.bulk	WEAU.PLAS.ISO.00752.002	752	189		0.353	7.279
WEAU.18.1D4.bulk	WEAU.PLAS.ISO.00771.001	771	245		0.241	6.080
WEAU.18.1D5.bulk	WEAU.PLAS.ISO.00771.002	771	178		0.431	8.211
WEAU.19.1A1.bulk	WEAU.PLAS.ISO.00981.001	981	299	Dual	0.466	11.906
WEAU.19.1A3.bulk	WEAU.PLAS.ISO.00981.002	981	380	Dual	0.533	11.227

[1] Virus isolate identification

[2] Virus isolates sequence identification

[3] Days following onset of symptoms

[4] P24 protein concentration in the supernatant at day 7 post infection in the absence of IFN treatment was measured by ELISA

[5] TZMbl cell line was pretreated using AMD and Maraviroc drug to inhibit virus interaction with X4 and R5 cellular coreceptors, respectively.

[6] Concentration of IFN necessary to suppress viral replication by 50% compared to untreated.

[7] Average of multiple biological replicates IC50 results

Table S3

Table S3. Number of viral isolates from ART suppressed individuals with and without treatment interruption

Virus	Subjects[1]	Gender[2]	Years on ART before ATI[3]	Sample time point	Viral load (copies/µl)	CD4 count (cells/µl)	Sample[4]	Number of Limiting dilution virus Isolates[5]	Study Number	References
VOA	B199	M	4	second leukapheresis	<20	200	QVOA Supernatant	1	MNU-0628	Lorenzi et al., 2016
VOA	B106	M	7	first and second leukapheresis	<20	390	QVOA Supernatant	2		
VOA	9242	M	2	during ATI (12 weeks) before rebound	<20	967	QVOA Supernatant	2	NCT02825797	Mendoza et al., 2018
VOA	9243	M	5	during ATI (12 weeks) before rebound	<20	545	QVOA Supernatant	1		
VOA	9244	M	5	2 weeks pre ATI	<20	796	QVOA Supernatant	4		
VOA	9244	M	5	during ATI (12 weeks) before rebound	<20	796	QVOA Supernatant	2		
VOA	9241	M	5	during ATI (12 weeks) before rebound	<20	709	QVOA Supernatant	1		
VOA	9241	M	5	2 weeks pre ATI	<20		QVOA Supernatant	4		
Rebound	9242	M	2	16 weeks post ATI	65,520	450	Plasma	5		
Rebound	9243	M	5	21 weeks post ATI	10,110	350	Plasma	1		
Rebound	9244	M	5	22 weeks post ATI	120,330	730	Plasma	5		
Rebound	9241	M	5	22 weeks post ATI	13,250	500	Plasma	1		
VOA	A06	M	>3.6	2.5 weeks pre ATI	<50	>470	QVOA Supernatant and cryopreserved PBMC	6	NCT02463227	Bar et al., 2016; Salantes et al., 2018
VOA	A06	M	>3.6	10.5 months post ATI	<50		QVOA Supernatant	3		
VOA	A08	M	>3.6	4 weeks pre ATI	<50	>470	QVOA Supernatant	4		
VOA	A08	M	>3.6	11 months post ATI	<50		QVOA Supernatant and cryopreserved PBMC	16		
VOA	A09	M	>3.6	1 week pre ATI	<50	>470	QVOA Supernatant	4		
VOA	A09	M	>3.6	12 months post ATI	<50		QVOA Supernatant	2		
Rebound	A09	M	>3.6	3 weeks post ATI	2,330	>350	Plasma	8		
Rebound	A08	M	>3.6	5 weeks post ATI	20,000	>350	Plasma	17		
Rebound	S22	M	8	during 2nd ATI	750,000	449	Plasma	5	NCT00051818	Papasavvas et al., 2004
Rebound	S23	M	5	during 2nd ATI	556,372	351	Plasma	2		
Rebound	S30	M	5	during 3rd ATI	517,473	467	Plasma	4		
Rebound	004	M	>1	4 weeks post ATI (week 12 of study)	33,812	794	Plasma	4	NCT02227277	Azzoni et al, 2020
Rebound	030	M	>1	4 weeks post ATI (week 12 of study)	18,056	377	Plasma	4		
Rebound	044	F	>1	4 weeks post ATI (week 12 of study)	20,171	496	Plasma	4		
Rebound	601	M	20	5 weeks post ATI (week 29 of study)	112,160	707	Plasma	6	NCT02588586	Cohen et al., 2018

[1] All subjects were recruited in the US and had subtype B infections, except for subject A09 who also had a subtype A strain (only subtype B viruses were isolated)

[2] M, male; F, female.

[3] ATI, analytical treatment interruption

[4] QVOA, quantitative viral outgrowth assay

[5] Viral isolates were confirmed by sequence analysis to be single virion-derived (Genbank accession number are shown in Table S X)

Table S4

Table S4. Biological characterization of viral outgrowth and rebound isolates

Type[1]	Isolate ID[2]	Study number	Replicative capacity (ng p24/ml)[3]	Isolate tropism[4]	IFNα2 IC$_{50}$ (pg/ml)[5]	IFNβ IC$_{50}$ (pg/ml)[5]	sCD4 IC50 (ug/ml)[6]	CD4-Ig IC50 (ug/ml)[7]	Infectivity (IU/pg RT)[8]	p24 Particle release (%)[9]
VOA	B199.2.C.BF.1	MNU-0628	80		0.04	0.12				
VOA	B106.1.C.3.8[11]		100		0.18	3.12				
VOA	B106.2.C.D6.S8[11]		195		0.16	1.96				
VOA - week 12[10]	9242.VOA.12F23	NCT02825797	386	R5	0.02	0.04	>20	>20	39.33	
VOA - week 12[10]	9242.VOA.12M6		641	R5	0.01	0.01	>20	17.43	79.48	
VOA - week 12[10]	9243.VOA.12Y10		679	R5	0.02	0.04	>20	17.03	76.88	
VOA - week 12[10]	9244.VOA.12I10		492	R5	0.02	0.04	>20	1.73	14.14	
VOA - week 12[10]	9244.VOA.12J17		483	Dual	0.02	0.09	>20	>20	30.82	
VOA - week -2[10]	9244.VOA.G12		694	R5	0.01	0.10	>20	>20	17.29	
VOA - week -2[10]	9244.VOA.H1		496	R5	0.02	0.06			45.21	
VOA - week -2[10]	9244.VOA.K2		404	Dual	0.02	0.15	>20	>20	46.79	48%
VOA - week -2[10]	9244.VOA.P11		423	R5	0.02	0.11	>20	10.97	139.08	
VOA - week 12[10]	9241.VOA.12AU7		360	Dual	0.03	0.25			174.31	56%
VOA - week -2[10]	9241.VOA.D2		445	R5	0.02	0.09			2.54	42%
VOA - week -2[10]	9241.VOA.A10		315		0.04	0.13				
VOA - week -2[10]	9241.VOA.C19		282		0.04	0.09				
VOA - week -2[10]	9241.VOA.C8		278		0.04	0.10				
Rebound	9242.REB.6B8		299	R5	1.13	45.04			4.59	
Rebound	9242.REB.6A7[12]		309	R5	1.05	21.99			5.63	53%
Rebound	9242.REB.6B2[12]		286	R5	1.93	30.49			15.69	
Rebound	9242.REB.13B1[12]		547	R5	1.26	61.88			9.93	
Rebound	9242.REB.13B8[12]		418	R5	1.70	58.24			9.68	
IMC	9242.REB.r1[12]		108	R5	2.08	46.67			3.54	
Rebound	9243.REB.13F7		554	R5	1.56	49.26			10.58	
Rebound	9244.REB.7A8		499	R5	1.53	54.25			6.41	81%
Rebound	9244.REB.7A1		459	R5	1.59	31.67			6.05	
Rebound	9244.REB.7C1		567	R5	1.72	34.43			4.14	
Rebound	9244.REB.9D3		578	R5	1.35	48.06	>20	10.21	27.08	61%
Rebound	9244.REB.9E6		535	R5	1.70	77.03	>20	>20	136.72	81%
Rebound	9241.REB.7D4		626	R5	1.62	82.64	>20	>20	4.82	91%
VOA - Pre ATI	A06.VOA.M5	NCT02463227	139	R5	0.15	1.70	>20	>20	71.20	52%
VOA - Pre ATI	A06.VOA.M10		144	R5	0.11	1.57	>20	>20	42.78	22%
VOA - Pre ATI	A06.VOA.M30		158	R5	0.09	1.81	>20	>20	62.60	28%
VOA - Pre ATI	A06.VOA.M28		97	R5	0.09	1.17			83.36	
VOA - Pre ATI	A06.VOA.M19		150	R5	0.08	1.40			54.54	38%
VOA - Pre ATI	A06.VOA.M29		124	R5	0.07	2.99			128.33	
VOA - Post ATI	A06.VOA.2B		143	R5	0.07	0.85			128.52	51%
VOA - Post ATI	A06.VOA.M20		126	R5	0.09	1.67			121.20	48%
VOA - Post ATI	A06.VOA.M3		117		0.09	1.10				
VOA - Pre ATI	A08.VOA.1E2		99	X4	0.04	0.32			75.20	
VOA - Pre ATI	A08.VOA.M1		1548	Dual	0.02	0.01	>20	>20	14.96	
VOA - Pre ATI	A08.VOA.M4		965	X4	0.01	0.04			43.40	49%
VOA - Pre ATI	A08.VOA.M5		665	X4	0.01	0.10			16.78	24%
VOA - Post ATI	A08.VOA.M17		977	Dual	0.01	0.60			20.23	
VOA - Post ATI	A08.VOA.M20		620	X4	0.01	0.08			8.64	31%
VOA - Post ATI	A08.VOA.1B5		122	X4	0.03	0.90	>20	>20	8.29	
VOA - Post ATI	A08.VOA.1C8		152	X4	0.03	0.08			4.35	
VOA - Post ATI	A08.VOA.1F8		163	Dual	0.03	0.07			4.44	
VOA - Post ATI	A08.VOA.3D8		65	R5	1.47	5.17			6.04	
VOA - Post ATI	A08.VOA.4A1		103	X4	0.02	0.15	>20	>20	13.91	
VOA - Post ATI	A08.VOA.4E4		120	X4	0.02	0.09	>20	>20	15.37	
VOA - Post ATI	A08.VOA.5C3		83	X4	0.03	0.39			2.93	
VOA - Post ATI	A08.VOA.5E2		142	X4	0.02	0.03	>20	>20	13.11	
VOA - Post ATI	A08.VOA.5E4		119	Dual	0.04	0.49			1.83	
VOA - Post ATI	A08.VOA.6D3		120	X4	0.03	0.04			11.00	
VOA - Post ATI	A08.VOA.6E2		86	X4	0.02	0.08			3.13	
VOA - Post ATI	A08.VOA.6F6		66	R5	1.23	8.24			8.84	
VOA - Post ATI	A08.VOA.7F8		150	Dual	0.04	0.14			3.36	
VOA - Post ATI	A08.VOA.8E8		50	Dual	0.03	0.03			2.65	
Rebound	A08.REB.1A3		451	Dual	1.06	83.13			2.50	94%
Rebound	A08.REB.1D1		496	Dual	1.45	51.37			5.98	87%
Rebound	A08.REB.5C2		125	R5	1.22	80.62			47.47	
Rebound	A08.REB.5D2		250	X4	1.44	45.44			29.40	
Rebound	A08.REB.6B3		125	R5	0.85	55.84			59.56	
Rebound	A08.REB.6D6		728	X4	1.22	46.83	>20	>20	40.83	
Rebound	A08.REB.7A3		504	X4	1.51	75.85			24.00	
Rebound	A08.REB.7C1		707	X4	1.43	68.06			24.61	
Rebound	A08.REB.7C2		176	R5	2.07	44.85			24.26	
Rebound	A08.REB.7D3		309	X4	1.65	38.78	>20	>20	25.16	
Rebound	A08.REB.8A5		768	X4	1.59	41.98	>20	>20	39.00	
Rebound	A08.REB.8B3		763	X4	1.61	41.17			46.30	
Rebound	A08.REB.8D1		425	X4	1.33	31.24	>20	>20	29.05	
Rebound	A08.REB.6B5		510	X4	2.28	64.49			142.66	
Rebound	A08.REB.8B5		510	X4	1.94	69.78			224.92	
Rebound	A08.REB.2F4		420		3.01	92.25				77%
IMC	A08.REB.2F4		66	R5	2.01	117.61			3.82	
Rebound	A08.REB.1A5		506	X4	1.69	42.34			1.31	84%
IMC	A08.REB.1A5		106	X4	2.70	49.23				
VOA - Pre ATI	A09.VOA.M25		194	R5	0.26	1.29			82.33	
VOA - Pre ATI	A09.VOA.M22		206	R5	0.05	0.19			115.31	
VOA - Pre ATI	A09.VOA.M2		254	R5	0.05	0.46			82.42	23%
VOA - Pre ATI	A09.VOA.M6		171	R5	0.06	0.70			110.34	49%
VOA - Post ATI	A09.VOA.M9		171	R5	0.21	0.06			45.72	
VOA - Post ATI	A09.VOA.M16		285	R5	0.05	0.69			74.11	
Rebound	A09.REB.1B5		275		3.16	58.67				
Rebound	A09.REB.1D5		101		2.19	51.20				
Rebound	A09.REB.2B2		171	R5	2.79	26.36			1.05	
Rebound	A09.REB.1A1		376	R5	2.40	46.03			7.73	73%
Rebound	A09.REB.1A3		227	R5	1.78	58.57			3.04	79%
Rebound	A09.REB.1A4		239	R5	2.48	70.36			3.01	
Rebound	A09.REB.1A5		249	R5	2.55	61.27	>20	>20	11.68	
Rebound	A09.REB.1A2		221	R5	2.54	83.45			5.30	74%
IMC	A09.REB.1A2		104	R5	1.63	142.15				
Rebound	S22.REB.24C4	NCT00051818	399	R5	1.64	90.59			5.50	74%
Rebound	S22.REB.1E2		389	R5	1.03	61.14			8.59	
Rebound	S22.REB.1F5		374	R5	1.62	93.32	>20	>20	12.95	
Rebound	S22.REB.3A6		487	R5	1.45	97.27	>20	9.977	21.40	74%
Rebound	S22.REB.3B6		378	R5	1.00	75.65	>20	>20	13.32	65%
Rebound	S23.REB.3D1		358	R5	1.70	66.56	>20	11.63	21.68	
Rebound	S23.REB.24A5		475	R5	1.25	76.30			29.05	
Rebound	S30.REB.8D1		407		1.21	84.20				
Rebound	S30.REB.2D1		303		2.14	87.20				
Rebound	S30.REB.2D2		350	R5	1.54	70.82			18.95	71%
Rebound	S30.REB.7D1		336	R5	1.72	72.69			3.42	85%
Rebound	004.REB.4D4	NCT02227277	413	R5	2.58	93.58	>20	>20	18.74	85%
Rebound	004.REB.4E6		263	R5	2.54	63.21	>20	>20	15.19	88%
Rebound	004.REB.4D1		259	R5	2.65	97.87	>20	>20	32.26	80%
Rebound	004.REB.4E3		252	R5	5.55	111.80	>20	>20	8.66	
Rebound	030.REB.3E1		371	R5	2.99	56.49			24.35	68%
Rebound	030.REB.2E1		396	R5	2.84	47.24			30.22	93%
Rebound	030.REB.4E1		427	R5	3.48	70.43			30.93	74%
Rebound	030.REB.8E1		308	R5	2.84	69.21			32.36	87%
Rebound	044.REB.6F1		283	R5	3.42	79.99			39.42	74%
Rebound	044.REB.5F1		348	R5	2.75	69.41			30.89	86%
Rebound	044.REB.7F1		329	R5	2.80	72.71			16.85	81%
Rebound	044.REB.8F1		355	R5	2.48	91.45			37.08	92%
Rebound	601.REB.4B7	NCT02588586	497	R5	2.15	64.85			28.56	
Rebound	601.REB.4C3		483	R5	2.03	33.29	>20	>20	30.56	73%
Rebound	601.REB.4B4[12]		468	R5	2.17	65.81			13.49	74%
Rebound	601.REB.4A8[12]		546	R5	1.81	42.24			11.98	71%
Rebound	601.REB.4A7[12]		562	R5	2.25	60.84			12.89	64%
Rebound	601.REB.4C1[12]		536	R5	2.02	54.66	>20	>20	20.30	72%
IMC	601.REB.r1[12]		96	R5	1.68	91.79			3.58	

[1] Isolates were obtained by expanding viral outgrowth assay (VOA) supernatants as previously reported (Lorenzi et al., 2016; Bar et al., 2016; Salantes et al., 2018; and Mendoza et al., 2018) or generated de novo from cryopreserved PBMCs or plasma samples.

[2] Viral sequence identifier as submitted to GenBank (for accession numbers see Table S5).

[3] Concentration of p24 antigen in CD4+ T-cell culture at day 7 postinfection in the absence of IFN treatment.

[4] Viral tropism as determined in TZMbl cells; cells were pretreated with AMD and Maraviroc prior to virus infection to inhibit interaction with CXCR4 and CCR5 cellular receptors, respectively.

[5] Dose of IFN that reduced viral replication in CD4+ T cells by 50%.

[6] Concentration of soluble CD4 (sCD4) that reduced infectivity by 50% in a TZMbl neutralization assay.

[7] Concentration of CD4-Ig that reduced infectivity by 50% in a TZMbl neutralization assay.

[8] Infectious units per particle (picogram of RT) measured in TZM-bl cells.

[9] Percent of viral release from CD4+ T cells 7 days after infection, expressed as the ratio of cell-free p24 and cell-associated plus cell free p24.

[10] Samples from the NCT02825797 study were collected before (-2 week) and during (12 week) treatment interruption, but prior to any detectable rebound virus.

[11] B106.1.C.3.8 was isolated from the first and 106.2.C.D6.S8 from the second leukapheresis sample.

[12] Infectious molecular clones (IMCs) 9242.REB.r1 and 601.REB.r1 were synthesized based on the consensus sequences of four closely related rebound isolates, including 9242.REB.6A7, 9242.REB.6B2, 9242.REB.13B1 and 9242.REB.13B8 as well as 601.REB.4B4, 601.REB.4A8, 601.REB.4A7 and 601.REB.4C1, respectively.

Table S5

Table S5. Virus replication in macrophages from different donors.

							Donors							
ID	Type	Virus	Source	Virus Tropism	sCD4 IC50 (ug/ml)	CD4-Ig IC50 (ug/ml)	ZB620	ZB624	ZB710	ZB28	ZB31	ZB722	ZB725	ZB668
MCST	Chronic	IMC	Parrish et al., PNAS 2013	R5			no	yes	yes	yes	no			
STCOr1	Chronic	IMC	Parrish et al., PNAS 2013	Dual			no	yes	no	no	yes			
THRO	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	R5			no	yes	yes	yes	yes			
TYBE***	Chronic***	IMC	Yi et al., J Virol 1999	X4						yes	yes			
UG021***	Chronic***	IMC	Gao et al., J Virol 1996	X4						yes	yes			
WITO	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	R5			no	yes	yes	yes	yes			
YU2***	Chronic***	IMC	Li et al., J Virol 1991	R5	0.9224	0.08674	no	yes	yes	yes	yes			
REJO	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	R5			no	yes	yes	yes	yes			
RHGA	Chronic	IMC	Parrish et al., PNAS 2013	R5			no	yes	yes	no	no			
RHPA	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	R5			no	yes	yes	yes	yes			
CH058	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	R5			no	yes	yes	yes	yes	yes	no	yes
CH077	Transmitted founder	IMC	Salazar-Gonzalez et al., J Virol 2009	Dual			no	yes	yes	yes	yes			
CH141	Chronic	IMC	Parrish et al., PNAS 2013	R5			no	yes	yes	yes	yes			
CH167	Chronic	IMC	Parrish et al., PNAS 2013	R5			no	yes	yes	yes	yes			
CH042	Transmitted founder	IMC	Parrish et al., PNAS 2013	R5			no	yes	yes	yes	yes			
CH470	Transmitted founder	IMC	Parrish et al., PNAS 2013	R5						yes	yes	yes	yes	yes
CH492	Chronic	IMC	Iyer et al., PNAS 2017	R5						no	no	no	no	no
MM33.TF	Transmitted founder	IMC	This study	R5						no	no			
MM33.13	Chronic	IMC	This study	R5						yes	yes			
MM33.17	Chronic	IMC	This study	R5						no	no			
9244.VOA.G12	VOA (week -2)	Isolate	Mendoza et al., 2018	R5	>20	>20	no	yes		yes	yes			
9244.VOA.K2	VOA (week -2)	Isolate	Mendoza et al., 2018	Dual	>20	>20	no	yes		yes	yes			
9244.VOA.P11	VOA (week -2)	Isolate	Mendoza et al., 2018	R5	>20	10.97	no	yes		yes	yes			
9244.VOA.12J17	VOA (week 12)	Isolate	Mendoza et al., 2018	Dual			no	yes		yes	yes			
9244.REB.9D3	Rebound	Isolate	This study	R5	>20	>20	yes	yes		yes	yes			
9244.REB.9E6	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
9241.REB.7D4	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
9242.REB.r1	Rebound	IMC	This study	R5			no	yes	yes	yes	yes	yes	yes	yes
A08.VOA.1B5	VOA (Post ATI)	Isolate	This study	X4	>20	>20				no	no	no	no	no
A08.VOA.1C8	VOA (Post ATI)	Isolate	This study	X4								no	no	
A08.VOA.1F8	VOA (Post ATI)	Isolate	This study	Dual								no	no	
A08.VOA.3D8	VOA (Post ATI)	Isolate	This study	R5								no	no	no
A08.VOA.4E4	VOA (Post ATI)	Isolate	This study	X4	>20	>20				no	no	no	no	no
A08.VOA.5E4	VOA (Post ATI)	Isolate	This study	Dual								no	no	no
A08.VOA.6D3	VOA (Post ATI)	Isolate	This study	X4								no	no	no
A08.VOA.6F6	VOA (Post ATI)	Isolate	This study	R5								no	no	no
A08.VOA.5E2	VOA (Post ATI)	Isolate	This study	X4	>20	>20						no	no	no
A08.VOA.7F8	VOA (Post ATI)	Isolate	This study	Dual								no	no	
A08.VOA.7C1	VOA (Post ATI)	Isolate	This study	X4								no	no	
A08.VOA.8E8	VOA (Post ATI)	Isolate	This study	Dual								no	no	
A08.REB.5C2	Rebound	Isolate	This study	R5						yes	yes	yes	no	yes
A08.REB.5D2	Rebound	Isolate	This study	X4						no	no	no	no	no
A08.REB.6B3	Rebound	Isolate	This study	R5						yes	yes	no	no	no
A08.REB.6D6	Rebound	Isolate	This study	X4	>20	>20				no	no	no	no	no
A08.REB.7C1	Rebound	Isolate	This study	X4						no	no	no	no	no
A08.REB.7C2	Rebound	Isolate	This study	R5						no	yes	yes	no	no
A08.REB.7D3	Rebound	Isolate	This study	X4	>20	>20				no	no	no	no	no
A08.REB.8D1	Rebound	Isolate	This study	X4	>20	>20						no	no	no
A08.REB.8A5	Rebound	Isolate	This study	X4	>20	>20						no	no	no
A08.REB.1A5	Rebound	IMC	This study	X4			no	no	no	no	no	no	no	no
A08.REB.2F4	Rebound	IMC	This study	R5			no	yes	yes	no	no	yes	yes	yes
A09.REB.1A5	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
A09.REB.1A2	Rebound	IMC	This study	R5			no	yes	yes	yes	yes	yes	yes	yes
S22.REB.1F5	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
S22.REB.3B6	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
S23.REB.3D1	Rebound	Isolate	This study	R5	>20	11.63	no	yes		yes	yes			
004.REB.4D1	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
004.REB.4E3	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
004.REB.4E6	Rebound	Isolate	This study	R5	>20	>20	no	yes		yes	yes			
601.REB.r1	Rebound	IMC	This study	R5			no	yes	yes	yes	yes	yes	yes	yes

*Using CD14 selection, moncytes were isolates from peripheral blood mononuclear cells of 8 healthy donors, and cultured in M-CSF containing media to allow differentiation into macrophages. Virus replication was monitored for 20 days by measuring p24 antigen in culture supernatants. "yes" denotes p24 production above 0.5ng/ml.