

Table S1. Number of unique clonotypes analyzed for each of the 11 donors.

Donor	# unique clonotypes
HIP1	10,706,238
HIP2	17,102,271
HIP3	8,982,311
HIV/Flu1	402,288
HIV/Flu2	414,420
HIV/Flu3	645,147
HIV/Flu4	447,724
HIV/Flu5	314,140
CORD1	231,205
CORD2	248,023
CORD3	323,762

Table S2. 306 common V-J pairs were used to perform normalization and PCA transformation, to reduce the contribution from rare genes. These genes are listed below.

V genes	V genes cont'd	J genes
IGHV1-2	IGHV3-48	IGHJ1
IGHV1-3	IGHV3-49	IGHJ2
IGHV1-8	IGHV3-52	IGHJ3
IGHV1-18	IGHV3-53	IGHJ4
IGHV1-24	IGHV3-64	IGHJ5
IGHV1-45	IGHV3-66	IGHJ6
IGHV1-46	IGHV3-71	
IGHV1-58	IGHV3-72	
IGHV1-69	IGHV3-73	
IGHV1-69-2	IGHV3-74	
IGHV2-5	IGHV4-4	
IGHV2-26	IGHV4-28	
IGHV2-70	IGHV4-30-2	
IGHV3-7	IGHV4-30-4	
IGHV3-9	IGHV4-31	
IGHV3-11	IGHV4-34	
IGHV3-13	IGHV4-38-2	
IGHV3-15	IGHV4-39	
IGHV3-20	IGHV4-55	
IGHV3-21	IGHV4-59	
IGHV3-23	IGHV4-61	
IGHV3-30	IGHV5-10-1	
IGHV3-30-3	IGHV5-51	
IGHV3-33	IGHV6-1	
IGHV3-43	IGHV7-4-1	
IGHV3-47		

Table S3: BIOMEDII primers

Primer	Application	Sequence
Human IgH cDNA synthesis and reverse PCR primer		
J _H	Human IgH RT primer and reverse PCR primer	NNNNCTTACCTGAGGAGACGGTGACC
Human IgH forward PCR primer mix		
V _H 1-FR1	Human multiplex forward IgH PCR primer	NNNNGGCCTCAGTGAAGGTCTCCTGCAAG
V _H 2-FR1	Human multiplex forward IgH PCR primer	NNNNGTCTGGTCTACGCTGGTGAACCC
V _H 3-FR1	Human multiplex forward IgH PCR primer	NNNNCTGGGGGTCCCTGAGACTCTCCTG
V _H 4-FR1	Human multiplex forward IgH PCR primer	NNNNCTTCGGAGACCCTGTCCCTCACCTG
V _H 5-FR1	Human multiplex forward IgH PCR primer	NNNNCGGGGAGTCTCTGAAGATCTCCTGT
V _H 6-FR1	Human multiplex forward IgH PCR primer	NNNNTCGCAGACCCTCTCACTCACCTGTG
Human IgK cDNA synthesis and reverse PCR primer mix		
J _K 1	Human IgK RT primer and reverse PCR primer	NNNNTTTGATATCCACCTTGGTCCC
J _K 2	Human IgK RT primer and reverse PCR primer	NNNNTTAATCTCCAGTCGTGTCCC
Human IgK forward PCR primer mix		
V _K 1-2-FR1	Human multiplex forward IgK PCR primer	NNNNATGAGGSTCCCYGCTCAGCTGCTGG
V _K 3-FR1	Human multiplex forward IgK PCR primer	NNNNCTCTTCCTCCTGCTACTCTGGCTCCCAG
V _K 4-FR1	Human multiplex forward IgK PCR primer	NNNNATTTCTCTGTTGCTCTGGATCTCTG
Human Igλ cDNA synthesis and reverse PCR primer mix		
J _λ 1	Human Igλ RT primer and reverse PCR primer	NNNNAGGACGGTGACCTTGGTCCC
J _λ 2	Human Igλ RT primer and reverse PCR primer	NNNNAGGACGGTCAGCTGGGTCCC
Human Igλ forward PCR primer mix		
V _λ 1-FR1	Human multiplex forward Igλ PCR primer	NNNNGGTCTGGGCCAGTCTGTGCTG
V _λ 2-FR1	Human multiplex forward Igλ PCR primer	NNNNGGTCTGGGCCAGTCTGCCCTG
V _λ 3-FR1	Human multiplex forward Igλ PCR primer	NNNNGCTCTGTGACCTCCTATGAGCTG
V _λ 4+5-FR1	Human multiplex forward Igλ PCR primer	NNNNGGTCTCTCSCAGCYTGTGCTG
V _λ 6-FR1	Human multiplex forward Igλ PCR primer	NNNNGTTCTGGGCCAATTTTATGCTG
V _λ 7-FR1	Human multiplex forward Igλ PCR primer	NNNNGGTCCAATTCYCAGGCTGTGGT
V _λ 8-FR1	Human multiplex forward Igλ PCR primer	NNNNGAGTGGATTCTCAGACTGTGGT