

Supplementary table S1 – list of all 10 datasets for each mammalian host used in our study, along with accession numbers and sequence lengths for all genomic sequences used.

ERV locus	Mammalian host	Accession number	Length (bp)
<i>ERV3</i>	<i>Homo sapiens</i>	NT 007933.15	10782
	<i>Pan troglodytes</i>	AC 192481.3	10983
	<i>Pongo abelii</i>	AC 200427.2	10931
	<i>Macaca mulatta</i>	AC 210126.3	11260
<i>ERVIPF10H</i>	<i>Homo sapiens</i>	NT 010194.17	5571
	<i>Pan troglodytes</i>	AC 159217.3	5738
	<i>Pongo abelii</i>	AC 207004.4	5831
	<i>Macaca mulatta</i>	AC 200687.3	5719
<i>ERV PB1</i>	<i>Homo sapiens</i>	NT 026437.12	10640
	<i>Pan troglodytes</i>	AC 194649.3	10643
	<i>Pongo abelii</i>	AC 206925.4	10716
	<i>Macaca mulatta</i>	AC 148685.1	10296
<i>ERV WE1</i>	<i>Homo sapiens</i>	NT 007933.15	30917
	<i>Pan troglodytes</i>	AC 183672.2	30302
	<i>Pongo abelii</i>	AC 199834.2	31227
<i>ERV FRD</i>	<i>Homo sapiens</i>	NT 007592.15	9237
	<i>Pan troglodytes</i>	AC 182639.3	9225
	<i>Pongo abelii</i>	AC 200331.2	9223
	<i>Macaca mulatta</i>	AC 193044.4	9231
<i>ERV K3</i>	<i>Homo sapiens</i>	NT 011295.11	8110
	<i>Pan troglodytes</i>	AC 193186.3	8255
	<i>Pongo abelii</i>	AC 206006.3	7898
<i>ERV K9</i>	<i>Homo sapiens</i>	NT 011295.11	9861
	<i>Pan troglodytes</i>	AC 142300.1	9853
	<i>Pongo abelii</i>	AC 211912.3	9797
	<i>Macaca mulatta</i>	AC 197939.3	9980
<i>ERV K2</i>	<i>Homo sapiens</i>	NT 077531.4	9612
	<i>Pan troglodytes</i>	AC 183110.3	9190
<i>ERV K7</i>	<i>Homo sapiens</i>	NT 009237.18	9553
	<i>Pan troglodytes</i>	AC 183110.3	9576
<i>ERV P4</i>	<i>Homo sapiens</i>	NT 010966.14	12267
	<i>Pan troglodytes</i>	AC 146247.3	13041
	<i>Pongo abelii</i>	AC 205931.4	12431
	<i>Macaca mulatta</i>	AC 190302.5	12234