

Table S1. Primer sequences for HPyVs nested PCR

	Region	Primers	Position	Sequence	Fragment length
JCV*	NCCR ^Δ	JRE-1	4989-5009	5'-CCTCCCTATTCAGCACTTTGT-3'	678 bp
		LP-2	518-537	5'-TGCGGCACCCATGAACCTGA-3'	
		RFOR	5085-5104	5'-GCCTCCACGCCCTTACTACT-3'	353 bp
		RREV	291-310	5'-CAGAAGCCTTACGTGACAGC-3'	
	VP1 ^β	VP1-1	1569-1592	5'-TTGACTCAATTACAGAGGTAGAAT-3'	796 bp
		VP1-4a	2330-2353	5'-AGAAATTGGGTAGGGGTTTTTAAC-3'	
		JLP-16	1902-1924	5'-TAAAGCCTCCCCCACAACAGAAA-3'	357 bp
BKV [°]	NCCR ^π	BKTT1	5106-5134	5'-AAGGTCCATGAGCTCCATGGATTCTTCC-3'	694 bp
		BKTT2	630-657	5'-CTAGGCCCCCAAAAGTGCTAGAGCAGC-3'	
		BR-P1	82-101	5'-TTGAGAGAAAGGGTGGAGGC-3'	276 bp
		BR-P2	339-358	5'-GCCAAGATTCTAGGCTCGC-3'	
	VP1 ^ν	VP1-7	1480-1500	5'-ATCAAAGAAGTCTCCTCAAT-3'	537 bp
		VP1-2R	2038-2059	5'-GCACTCCCTGCATTTCCAAGGG-3'	
		327-1	1630-1649	5'-CAAGTGCCAAAATACTAAT-3'	327 bp
327-2	1956-1937	5'-TGCATGAAGGTTAAGCATGC-3'			
MCV [#]	NCCR ^Σ	ORIF1	4832-4853	5'-AGAGAGCCTATACCACTAACAG-3'	502 bp
		ORIR1	5314-5334	5'-ACATGATTGAACTTTTATTGC-3'	
		ORIF2	5077-5100	5'-AATTTACCAATATTGGCCAGCAG-3'	203 bp
		ORIR2	5261-5280	5'-GAGGCGGAGTTTGACTGAT-3'	
	VP1 ^α	VP1 FwE	3174-3193	5'-GGCTTTCTTTTGAGAGGCCT-3'	440 bp
		VP1 RevE	3613-3592	5'-TCCTTTGCATAGAGGGCCCACT-3'	
		VP1 FwI	3276-3297	5'-TTGGGTAAACAGTTTTCTCCTG-3'	240 bp
VP1 RevI	3515-3493	5'-AGTAACATTAATAATATCTAGGCA-3'			

*Reference Mad1 strain

[°]Reference Dunlop strain

[#]Reference strain EU375803

^ΔReference [30]

^βReference [14,31]

^πReference [32,33]

^νReference [34]

^ΣReference [35]

^αReference [36]

Table S2. Thermal profiles for NCCR HPyVs nested PCR

	Denaturation (time)	Annealing (time)	Extension (time)	Number of cycles
Outer/Inner reaction				
95°C for 5'				
JCPyV		59°C/63°C (30'')		35
BKPyV	95°C (30'')	60°C/63°C (30'')	72°C (30'')	30
MCPyV		54°C/58°C (30'')		35/30
72°C for 5'				

Table S3. Thermal profiles for VP1 HPyVs nested PCR

	Denaturation (time)	Annealing (time)	Extension (time)	Number of cycles
Outer/Inner reaction				
95°C for 5'				
JCPyV		63°C/66°C (30'')		30
BKPyV	95°C (30'')	60°C/58°C (30'')	72°C (30'')	30
MCPyV		58°C/54°C (30'')		30
72°C for 5'				

Figure S1. Sequence of the JCPyV Viral protein 1 (VP1) gene amplified from urine samples (nucleotide 1710-1924; ACCESSION NC_001699)

JCPyV

					(1771)		(1786)(1790)
Type 1a	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	catgtgggaggctgtg	gacct	t	taaaaaactgagg	
Type 1b	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	catgtgggaggctgtg	gacct	t	taaaaaactgagg	
Type 2a	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	A atgtgggaggctgtg	K acct	t	taaaaaactgagg	
Type 2c	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	A atgtgggaggctgtg	T acct	t	taaaaaactgagg	
Type 4	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	catgtgggaggctgtg	gacct	t	taaaaaactgagg	
Type 6	acagtg	ggccagaattccactacccaatctaaatgaggatctaacctgtggaaatatact	A atgtgggaggctgtg	gacc	C	taaaaaactgagg	
		(1813) (1818)		(1843)	(1850)		(1869-1870)
Type 1a	ttataggggtg	gacaag	tttgatgaatgtgcactctaattggg	caagca	actcatgacaatggtgcaggg	gaagccagtgcagggcaccagctttc	
Type 1b	ttataggggtg	gacaag	tttgatgaatgtgcactctaattgg	T caagca	G ctcatgacaatggtgcaggg	gaagccagtgcagggcaccagctttc	
Type 2a	ttataggggtg	R acaa	C tttgatgaatgtgcactctaattgg	T caagca	actcatgacaatggtgcaggg	A aagccagtgcagggcaccagctttc	
Type 2c	ttataggggtg	gacaa	C tttgatgaatgtgcactctaattgg	T caagca	G ctcatgacaatggtgcaggg	A aagccagtgcagggcaccagctttc	
Type 4	ttataggggtg	gacaa	C tttgatgaatgtgcactctaattgg	caagca	actcatgacaatggtgcaggg	CA aagccagtgcagggcaccagctttc	
Type 6	ttataggggtg	gacaa	C tttgatgaatgtgcactctaattgg	T caagca	actcatgacaatggtgcaggg	gaagccagtgcagggcaccagctttc	
Type 1a	atTTTTTTTTctgTTGGGGGGgaggcttta						
Type 1b	atTTTTTTTTctgTTGGGGGGgaggcttta						
Type 2a	atTTTTTTTTctgTTGGGGGGgaggcttta						
Type 2c	atTTTTTTTTctgTTGGGGGGgaggcttta						
Type 4	atTTTTTTTTctgTTGGGGGGgaggcttta						
Type 6	atTTTTTTTTctgTTGGGGGGgaggcttta						

K=G or T; R=A or G

Figure S2. Sequence of the BKPyV Viral protein 1 (VP1) gene amplified from urine samples (nucleotide 1681-1958; ACCESSION V01108 J02038)

BKPyV

(1687) (1698)

Type Ia actggg**G**tagatgctat**T**acagaggtagaatgcttcctaaaccagaaatgggggatccagatgaaaaccttaggggctttagtctaaagcta

Type Ib-1 actggg**G**tagatgctat**A**acagaggtagaatgcttcctaaaccagaaatgggggatccagatgaaaaccttaggggctttagtctaaagcta

Type Ib-2 actggg**C**tagatgctat**A**acagaggtagaatgcttcctaaaccagaaatgggggatccagatgaaaaccttaggggctttagtctaaagcta

(1809) (1860)

Type Ia agtgctgaaaatgactttagcagtgatagcccaga**G**agaaaaatgcttcctggttacagcacagcaagaattcccctcccgaattt**A**aatgag

Type Ib-1 agtgctgaaaatgactttagcagtgatagcccaga**A**agaaaaatgcttcctggttacagcacagcaagaattcccctcccgaattt**A**aatgag

Type Ib-2 agtgctgaaaatgactttagcagtgatagcccaga**M**agaaaaatgcttcctggttacagcacagcaagaattcccctcccgaattt**A**aatgag

(1887) (1908) (1923)

Type Ia gacctaacctgtggaaatct**A**ctgatgtgggaggctgtaac**T**gtacaaacagaggt**T**attggaataactagcatgcttaaccttcatgcagg

Type Ib-1 gacctaacctgtggaaatct**A**ctgatgtgggaggctgtaac**T**gtacaaacagaggt**C**attggaataactagcatgcttaaccttcatgcagg

Type Ib-2 gacctaacctgtggaaatct**A**ctgatgtgggaggctgtaac**A**gtacaaacagaggt**C**attggaataactagcatgcttaaccttcatgcagg

M=A or

