

Additional file 3: Table S3. Composition of the EBV-derived peptide pool.

#	Virus phase	Antigen	Amino acid†	Sequence‡	HLA class I restriction
1	Latent	EBNA1	72-80	RPQKRPSCI	B7
2	Latent	EBNA1	407-417	HPVG EADYFEY	B*35:01
3	Latent	EBNA1	508-517	FVYGGSKTSL	C03/04, A*68:02
4	Latent	EBNA1	518-526	YNLRRGTAL	B8
5	Latent	EBNA1	528-536	IPQCRLTPL	B7
6	Latent	EBNA1	566-574	LQTHIFAEV	A*02:06
7	Latent	EBNA1	574-582	VLKDAIKDL	A*02:03
8	Latent	EBNA2	14-23	YHLIVDTDSL	B38
9	Latent	EBNA2	42-51	DTPLIPLTIF	A2/B51
10	Latent	EBNA2	127-135	LASAMRML	B57/58
11	Latent	EBNA2	185-194	QPRLTTPQPL	B7
12	Latent	EBNA2	234-242	RPT ELQPTP	B55
13	Latent	EBNA2	377-384	TSSPSMPEL	C*03:04
14	Latent	EBNA3A	158-166	QAKWRLQTL	B8
15	Latent	EBNA3A	176-184	AYSSWMYSY	B*30:02
16	Latent	EBNA3A	246-253	RYSIFFDY	A24
17	Latent	EBNA3A	325-333	FLRGRAYGI	B8
18	Latent	EBNA3A	378-387	KRPPIFIRRL	B27
19	Latent	EBNA3A	406-414	LEKARGSTY	B62
20	Latent	EBNA3A	450-458	HLAAQGMAY	B62
21	Latent	EBNA3A	458-466	YPLHEQHGM	B*35:01
22	Latent	EBNA3A	491-499	VFSDGRVAC	A29
23	Latent	EBNA3A	502-510	VPAPAGPIV	B7
24	Latent	EBNA3A	596-604	SVRDRLARL	A2
25	Latent	EBNA3A	603-611	RLRAEAQVK	A3
26	Latent	EBNA3A	617-625	VQPPQLTQV	B*46:01
27	Latent	EBNA3B	149-157	HRCQAIRKK	B*27:05
28	Latent	EBNA3B	217-225	TYSAGIVQI	B*24:02
29	Latent	EBNA3B	243-253	RRARSLSAERY	B*27:02
30	Latent	EBNA3B	279-287	VSFIEFVGW	B58
31	Latent	EBNA3B	399-408	AVFDRKSDAK	A11
32	Latent	EBNA3B	416-424	IVTDFSVIK	A11
33	Latent	EBNA3B	488-496	AVLLHEESM	B*35:01
34	Latent	EBNA3B	657-666	VEITPYKPTW	B44
35	Latent	EBNA3C	163-171	EGGVGWRHW	B*44:03
36	Latent	EBNA3C	213-222	QNAARTLNTF	B62
37	Latent	EBNA3C	249-258	LRGKWQRRYR	B*27:05
38	Latent	EBNA3C	258-266	RRIYDLIEL	B*27:02/04/05
39	Latent	EBNA3C	271-278	HHIWQNLL	B39
40	Latent	EBNA3C	281-293	EENLLDFVRFMGV	B*44:02, A*02:01
41	Latent	EBNA3C	335-343	KEHVIQNAF	B*44:02
42	Latent	EBNA3C	343-351	FRKAQIQGL	B*27:05
43	Latent	EBNA3C	881-889	QPRAPIRPI	B7
44	Latent	EBNA-LP	473-481	SLREWLLRI	A2
45	Latent	LMP1	38-46	FWLYIVMSD	n.d.
46	Latent	LMP1	51-60	ALLVLYSFAL	A2
47	Latent	LMP1	72-82	FRRDLLCPLGA	B40
48	Latent	LMP1	125-133	YLLEMLWRL	A2, A68, A69
49	Latent	LMP1	156-167	IALYLQQNWWTL	A2, B57, B58

50	Latent	LMP1	166-174	TLLVDLLWL	A2
51	Latent	LMP1	375-386	DPHGPVQLSYYD	B51
52	Latent	LMP2A	1-9	MGSLEMVPM	B*35:01
53	Latent	LMP2A	125-132	LPVIVAPYL	B53
54	Latent	LMP2A	131-139	PYLFWLAAI	A23
55	Latent	LMP2A	144-152	FTASVSTVV	A68
56	Latent	LMP2A	200-208	IEDPPFNSL	B*40:01
57	Latent	LMP2A	236-245	RRRWRRLTVC	B*14:01, B*27:04
58	Latent	LMP2A	240-251	RRLTVCGGIMFL	A1, B27
59	Latent	LMP2A	257-265	LIVDAVLQL	A*02:04/17
60	Latent	LMP2A	293-301	GLGTLGAAL	A2
61	Latent	LMP2A	329-337	LLWTLVLL	A*02:01
62	Latent	LMP2A	340-352	SSCSCPLSKILL	A11, B8
63	Latent	LMP2A	350-359	ILLARLFY	A29
64	Latent	LMP2A	356-364	FLYALALL	A2
65	Latent	LMP2A	419-427	TYGPVFMCL	A24
66	Latent	LMP2A	426-434	CLGGLTMV	A*02:01
67	Latent	LMP2A	442-455	VMSNTLLSAWILTA	A2, A25
68	Latent	LMP2A	453-461	LTAGFLIFL	A*02:06
69	Lytic	BMLF1	244-252	KDTWLDARM	n.d.
70	Lytic	BMLF1	259-267	GLCTLVAML	A*02:01
71	Lytic	BMLF1	376-384	DEVEFLGHY	B18
72	Lytic	BMLF1	414-423	SRLVRAILSP	B14
73	Lytic	BMRF1	20-28	CYDHAQTHL	A24
74	Lytic	BMRF1	208-216	TLDYKPLSV	A*02:01
75	Lytic	BMRF1	268-276	YRSGIIAVV	B39, C6
76	Lytic	BMRF1	286-295	LPLDLSVILF	A11, B35, B53
77	Lytic	BRLF1	25-37	LVSDYCNVLNKEF	A*02:05, B18
78	Lytic	BRLF1	91-99	AENAGNDAC	B45
79	Lytic	BRLF1	109-117	YVLDHLIVV	A*02:01
80	Lytic	BRLF1	134-142	ATIGTAMYK	A11
81	Lytic	BZLF1	14-23	TPDPYQVPFV	B51
82	Lytic	BZLF1	16-26	DPYQVPFVQAF	B7
83	Lytic	BZLF1	44-52	LPCVLWPVL	B7
84	Lytic	BZLF1	52-64	LPEPLPQGQLTAY	B*35:01/08
85	Lytic	BZLF1	65-74	HVSTAPTGSW	A25
86	Lytic	BZLF1	66-75	VSTAPTGSWF	B*58:01
87	Lytic	BZLF1	77-89	APQPAPENAYQAY	B*35:01/08
88	Lytic	BZLF1	122-130	VQTAAAVVF	B*15:01, B58, B62
89	Lytic	BZLF1	169-183	EECDSELEIKRYKNR	B18, B*44:03
90	Lytic	BZLF1	179-187	RYKNRVASR	A31
91	Lytic	BZLF1	190-197	RAKFKQLL	B8
92	Lytic	BZLF1	192-200	KFKQLLQHY	A30
93	Lytic	BZLF1	197-205	LQHYREVAA	C8
94	Lytic	BZLF1	209-217	SENDRLRL	B49, B60

†Protein sequence was derived from the B95.8 strain of EBV. ‡ In some cases, two partially overlapping epitopes were combined in one peptide (grey). n.d. = not determined.