## 2.2 21mer Vaccine Peptides

	Sequence	Protein	Start	End	B-cell Epitope	HLA-I Coverage	HLA-II Coverage	$\mathrm{H}2^b$ I	$\mathrm{H}2^b$ II	$\mathrm{H2}^d$ I	$\mathrm{H2}^d$ II	Selection Sets
1	LLQFAYANRNRFLYIIKLIFL	M	34	54		89.0%	36.0%	+	+	+	+	$**^b*^d*^{bd}$ $\circ \circ^d \circ^{bd} \circledast^d$ $\circledast^b \circledast^{bd}$
2	FVLAAVYRINWITGGIAIAMA	${ m M}$	65	85		42.0%	76.0%	+	+	_	+	$\circ^b\circledast\circledast^b$
3	LSYFIASFRLFARTRSMWSFN	${\bf M}$	93	113		78.0%	46.0%	+	+	+	+	$*^{bd}$
4	LSPRWYFYYLGTGPEAGLPYG	N	104	124		49.0%	23.0%	+	+	+	-	*
5	GTRNPANNAAIVLQLPQGTTL	N	147	167		20.0%	55.0%	-	+	-	+	$\circ^{bd}$
6	IAQFAPSASAFFGMSRIGMEV	N	304	324		63.0%	51.0%	+	+	+	+	$\circledast^d \circledast^{bd}$
7	SASAFFGMSRIGMEVTPSGTW	N	310	330		65.0%	37.0%	+	-	+	-	$*^b*^d*^{bd}$
8	IGMEVTPSGTWLTYTGAIKLD	N	320	340		54.0%	52.0%	+	+	-	-	$\circledast^b$
9	GTWLTYTGAIKLDDKDPNFKD	N	328	348		26.0%	62.0%	+	+	-	-	$\circ^b \circledast$
10	KQQTVTLLPAADLDDFSKQLQ	N	388	408		11.0%	52.0%	-	-	-	+	$\circ \circ^d$
11	LPFNDGVYFASTEKSNIIRGW	$\mathbf{S}$	84	104		58.0%	41.0%	-	+	-	-	*
12	PLVDLPIGINITRFQTLLALH	$\mathbf{S}$	225	245		65.0%	62.0%	+	-	+	+	$\circledast \circledast^d$
13	GAAAYYVGYLQPRTFLLKYNE	$\mathbf{S}$	261	281		88.0%	38.0%	+	+	+	-	$*^b*^d*^{bd}$
14	LTDEMIAQYTSALLAGTITSG	$\mathbf{S}$	865	885		42.0%	73.0%	+	+	+	+	$^{*d} ^{bd}$
15	LSSNFGAISSVLNDILSRLDK	$\mathbf{S}$	966	986		59.0%	62.0%	+	+	-	+	$\circledast^b$
16	VTQQLIRAAEIRASANLAATK	$\mathbf{S}$	1008	1028		30.0%	81.0%	-	+	-	+	$\circ \circ^d \circ^b \circ^{bd}$
17	NYNYLYRLFRKSNLKPFERDI	$\mathbf{S}$	448	468	$S_{456-473}$	77.0%	38.0%	+	-	+	-	$*^d *^{bd} \circ *$
18	YRLFRKSNLKPFERDISTEIY	S	453	473	$S_{456-473}$	78.0%	23.0%	+	-	-	-	□ * * <sup>b</sup> o
19	KPFERDISTEIYQAGSTPCNG	$\mathbf{S}$	462	482	$S_{456-473}$	20.0%	21.0%	-	+	-	-	$\overline{\circ}^{b}$
20	QFGRDIADTTDAVRDPQTLEI	$\mathbf{S}$	564	584	$S_{580-583}$	0.0%	0.0%	-	-	-	-	
21	PQTLEILDITPCSFGGVSVIT	$\mathbf{S}$	579	599	$S_{580-583}$	13.0%	0.0%	-	-	-	-	*
22	QTLEILDITPCSFGGVSVITP	$\mathbf{S}$	580	600	$S_{580-583}$	13.0%	21.0%	-	-	-	-	
23	GFNFSQILPDPSKPSKRSFIE	$\mathbf{S}$	799	819	$S_{809-812}$	21.0%	23.0%	-	+	-	-	$\square$ o $\overline{\circ}^b$
24	PSKPSKRSFIEDLLFNKVTLA	$\mathbf{S}$	809	829	$S_{809-812}$	66.0%	0.0%	+	-	-	-	**b