Supplemental Table 1

Construct	**Plasmid backbone**	**Restriction sites**	**PCR template**	**PCR Cloning strategy** Primer pairs (F/R) and pairs of primers for chimeric constructs (N-terminal and C-terminal coding region) were given
HLA-DRα	pcDNA3.1 Zeo+	*Hind*III-*Bam*HI	cDNA	Lapaque *et al*. (2009)
HLA-DRβ	pcDNA3.1 Zeo+	*Eco*RI-*Not*I	cDNA	Lapaque *et al*. (2009)
CD8-DRα	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	HLA-DRα	Lapaque *et al*. (2009), designated CD8-DRA-extra in that study
CD8-DRβ	pcDNA3.1 Zeo+	*Eco*RI-*Not*I	HLA-DRβ	Lapaque *et al.* (2009)
CD8-DRβ-K225R	pcDNA3.1 Zeo+	*Eco*RI-*Not*I	CD8-DRβ	Lapaque *et al*. (2009)
CD8-DRβ-K225C	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ-Δ229	F: CTTCAGGAATCAGTGTGGACACTCTGGATGAGGATCCGAG, R: CAGAGTGTCCACACTGATTCCTGAAGTAGATGAACAG
CD8-DRβ-Δ233	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: TCGGATCCTCATGTTGGCTGCAGTCCAGAGT
CD8-DRβ-Δ229	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: AGGAATCAGAAAGGACACTCTGGATGAGGATCCGA
CD8-DRβ-Δ227	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCAGTGTCCTTTCTGATTCCTGATTC
CD8-DRβ-Δ225	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATTTCTGATTCCTGAAGTAGATG
CD8-DRβ-RNAK	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATTTAGCATTCCTGAAGTAGATGAACAGC
CD8-DRβ-RAQK	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATTTCTGAGCCCTGAAGTAGATGAACAGCC
CD8-DRβ-ANQK	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATTTCTGATTAGCGAAGTAGATGAACAGCCCTG
CD8-DRβ-RAAK	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATTTAGCAGCCCTGAAGTAGATGAACAGCC
CD8-DRβ-HF 0	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CAGACCCAGTACAGCGCCCCCGACTCCACTCAGTGCCTTGCTCTGTGCAGACCC C-term: F: GCTGTACTGGGTCTGCTCTTCGCTGGGACAGGGCTGTTCATCGCATTCAGGAATCAGAAAGG ACAC, R: Zeo2
CD8-DRβ-HF 1	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CCCCTGTCCCTAGGAAGAGAGCGCCCAGAACAAAACCCCCAGCTCCACTCAGCATCTTGCTC C-term: F: TCTCTTCCTAGGGACAGGGGCTTTCATCTACTTCAGGAATCAGAA, R: Zeo2
CD8-DRβ-HF 2	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: GAAGAGCAGGCCCAGAGCAAAGCCCCCGACTCCACTAGCCATCTTGCTCTGTGCAGAC C-term: F: TCTGGGCCTGCTCTTCCTTGCTACAGGGCTGTTCATCTACGCTAGGAATCAGAAAGGA CACTCTG, R: Zeo2
CD8-DRβ-HF 3	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CCCAGTCCCAAGGAAAGCCAGGCCCAGCACAAAACCAGCGACTCCACTCAGCATCTTGC C-term: F: TTTCCTTGGGACTGGGCTGGCTATCTACTTCAGGAATCAGAAAGG, R: Zeo2

Supplemental Table 1, continued

CD8-DRβ-HF 4	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CAAGGAAGAGCAGGCCAGCCACAAAGCCCCCGACTCCAGCCAGCATCTTGCTCTGTGC C-term: F: TGGCCTGCTCTTCCTTGGCGCTGGGCTGTTCATCTACTTCAG, R: Zeo2
CD8-DRβ-HF 5	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: ACAGCCCAGTCCCAAGAGCGAGCAGTCCCAGTACAAAAGCCCCGACTCCACTCAGC C-term: F: TCTTGGGACTGGGCTGTTCGCTTACTTCAGGAATCAGAAAGGACA, R: Zeo2
CD8-DRβ-HF 6	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: TCCCAAGGAAGAGAAGAGCCAGCACAAAACCCCCGACAGCACTCAGCATCTTGCTCTGTG C-term: F: TCTTCTCTTCCTTGGGACAGCTCTGTTCATCTACTTCAGGAATCAG, R: Zeo2
CD8-DRβ-$M^{199-204}G\square A$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: GCCCAGCACGAAGCCAGCGGCAGCAGCAGCAGCCTTGCTCTGTGCAGACCC C-term: F: GGCTTCGTGCTGGGCCTGCT, R: Zeo2
CD8-DRβ-$G^{205-210}L\rightarrow A$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CCTGTCCCAAGGAAGAGAGCAGCAGCAGCTGCAGCCCCGACTCCACTCAGC C-term: F: CTCTTCCTTGGGACAGG, R: Zeo2
CD8-DRβ-$L^{211-216}G\rightarrow A$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CTGATTCCTGAAGTAGATGAACAGAGCTGCTGCTGCTGCCAGGCCCAGCACAAAG C-term: F: TCTGTTCATCTACTTCAGGAATCAG, R: Zeo2
CD8-DRβ-$L^{217-221}F\rightarrow A$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: T7seq, R: CAGAGTGTCCTTTCTGATTCCTAGCAGCAGCAGCGGCCCCTGTCCCAAGGAAGAGC C-term: F: TAGGAATCAGAAAGGACACTCTG, R: Zeo2
CD8-DRβ-$S^{194-AAAAA}$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: CCCCCTCGTGTGCACTGC C-term: F: CAGTGCACACGAGGGGGGCCGCTGCTGCTGCTATGCTGAGTGGAGTCGGG, R: Zeo2
CD8-DRβ-$S^{194-AAA}$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: CCCCCTCGTGTGCACTGC C-term: F: CAGTGCACACGAGGGGGGCCGCTGCTAGCAAGATGCTGAGTGGAGTCG, R: Zeo2
CD8-DRβ-S^{197-AA}	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: CCCCCTCGTGTGCACTGC C-term: F: CAGTGCACACGAGGGGGTCTGCACAGGCTGCTATGCTGAGTGGAGTC, R: Zeo2
CD8-DRβ-$S^{194-AAAAE}$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: CCCCCTCGTGTGCACTGC C-term: F: CAGTGCACACGAGGGGGGCCGCTGCTGCTGAGATGCTGAGTGGA, R: Zeo2
CD8-DRβ-$R^{222-AAA}$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: GAAGTAGATGAACAGCCCTGTC C-term: F: GACAGGGCTGTTCATCTACTTCGCAGCAGCGAAAGGACACTCTG, R: Zeo2
CD8-DRβ-$R^{222-EAA}$	pcDNA3.1 Zeo+	*Eco*RI-*Xho*I	CD8-DRβ	N-term: F: 5'Prim, R: GAAGTAGATGAACAGCCCTGTC C-term: F: GACAGGGCTGTTCATCTACTTCGAGGCAGCGAAAGGACACTCTG, R: Zeo2

Supplemental Table 1, continued

CD8-DRβ-K^{-1}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: 5'Prim, R: CGGGATCCTCATGCAGCAGCGGCAGCTGCAGCAGCTTTGTAGATGAACAGCCCTGTCCC
CD8-DRβ-K^{1}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATGCAGCGGCAGCAGCGGCAGCTTTGAAGTAGATGAACAGCCCTGTC
CD8-DRβ-K^{2}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: 5'Prim, R: CGGGATCCTCATGCAGCGGCAGCTGCAGCTTTAGCGAAGTAGATGAACAGCCC
CD8-DRβ-K^{3}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: 5'Prim, R: CGGGATCCTCATGCAGCGGCTTTAGCTGCAGCAGCGAAGTAGATGAACAG
CD8-DRβ-K^{4}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	N-term: F: T7seq, R: TCATGCAGCGGCAGCTTTTGCAGCAGCGAAGTAGATGAACAGCCCTGTC C-term: F: AGCTGCCGCTGCATGAGGATCCGAGCTCG, R : GATGCAATTTCCTCATTTTATTAG
CD8-DRβ-K^{5}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: 5'Prim, R: CGGGATCCTCATGCAGCGGCAGCAGCTTTAGCAGCGAAGTAGATGAACAG
CD8-DRβ-K^{6}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ-K^{5}	F: 5'Prim, R: CGGGATCCTCATGCAGCTTTGGCAGCTGCAGCAGCGA
CD8-DRβ-K^{7}	pcDNA3.1 Neo-	*Eco*RI-*Bam*HI	CD8-DRβ	F: T7seq, R: CGGGATCCTCATGCTTTAGCGGCAGCAGCGGCAGCGAAGTAGATGAACAGCCCTGTC
HLA-DRα-KK^{215,219}RR	pcDNA3.1 Zeo+	*Hind*III-*Bam*HI	HLA-DRα	F: 5'Prim, R: AATGGATCCTTACAGAGGCCCCCTGCGTTCTGCTGCATTGCTTCTGCGCACTCCCCTGATGATG
HLA-DRβ	pcDNA3.1 Hygro+	*Hind*III-*Bam*HI	cDNA , DRB1*0303	F: CCCCAAGCTTGGCCACCATGGTGTGTCTGAGGCTCCCTG R: AAGGATCCTAGCTCAGGAATCCTCTTGGCTG
HLA-DRβ-wt	pcDNA3.1 Hygro+	*Hind*III-*Bam*HI	CD8-DRβ, HLA-DRβ	N-term: F: 5'Prim, R: CTGTGCAGATTCAATCGATGCTCTCCATTCCACTG C-term: F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT , R: TATGGATCCTCAGCTCAAGAGTCCTGTTGGC This construct was a chimera between the DR3β extracellular domain and the perimembrane-transmembrane-cytoplasmic tail region of DR1β (which was also used in the CD8-DRβ reporters). A unique *ClaI* site (underlined in primers) was introduced in the non-folded amino acid chain between the folded part of the Ig domain and the juxtamembrane region. This resulted in minimal amino acid substitutions (^{191}RS^{192}→SI) in that region and did not affect DR folding or antigen loading (the modified DR was bound by mAb 16.23 which only binds correctly folded, SDS-stable DR3 dimers; data not shown)

Supplemental Table 1, continued

HLA-DRβ-K^{-1}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Hind*III-*Xho*I	CD8-DRβ-K^{-1}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC Pair of universal primers that bound at the DRβ perimembrane region (F) and 3' terminal of the multiple cloning site on pcDNA3.1 Hygro+ (R). Insert was digested with *Cla*I and *Xho*I (underlined) and inserted between the same sites in HLA-DR3-DRβ-wt. The reverse primer also contained a *M13F priming site* for screening for inserts by colony PCR (italics).
HLA-DRβ-K^{1}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{1}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{2}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{2}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{3}	HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{3}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{4}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{4}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{5}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{5}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{6}	pcDNA3.1 Hygro+ HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{6}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DRβ-K^{7}	HLA-DR3-DRβ-wt	*Cla*I-*Xho*I	CD8-DRβ-K^{7}	F: GAGCATCGATTGAATCTGCACAGAGCAAGATGCT, R: TATCTCGAG*TGTAAAACGACGGCCAGT*GATCAGCGGTTTAAACTTAAGC
HLA-DQβ	pCR2.1-TOPO	-	cDNA, HeLa.CIITA	F: ATAAGCTTCGCCACCATGTCTTGGAAGAAGGCTTTG, R: TACTCGAGTCTCAGGAGTCAGTGCAGAAG universal primer pair for DQB1, with *Hind*III and *Xho*I sites, START and STOP codons underlined
HLA-DRβ-$^{DQβ215-229}$	pcDNA3.1 Zeo+	*Hind*III-*Xho*I	HLA-DRβ-wt, HLA-DQβ	C-term: F: 5'Prim, R: CCAAGCCCAAGGAAGAGCAGGCCCA N-term: F: TGCTCTTCCTTGGGCTTGGCCTTATCATCCGTCAAA, R: TACTCGAGTCTCAGGAGTCAGTGCAGAAG

Supplemental Table 1, continued

HLA-DRβ-$^{DQβ215-221}$	pcDNA3.1 Hygro+	*Hind*III-*Bam*HI	HLA-DRβ-$^{DQβ215-229}$, HLA-DRβ-wt	N-term.: F: 5'Prim, R: TCCTTTCTGATTCCTTTGACGGATGATAAGGCC C-term: F: CATCCGTCAAAGGAATCAGAAAGGACACTCTGG, R: Zeo2
EGFP-MARCH8	pEGFP C2	*Eco*RI-*Kpn*I	pTracer/ MARCH8	F: GCTTGGTACTAATACGACTCACTATAGGGA, R: AGCGGTACCTAATGGTGATGGTGATGATG MARCH8wt cloned from pTracer construct together with V5 and HIS tags, cut with *Eco*RI (on plasmid) and *Kpn*I (underlined)
EGFP-MARCH8mut	pEGFP C2	*Eco*RI-*Kpn*I	pTracer/ MARCH8 mut	F: GCTTGGTACTAATACGACTCACTATAGGGA, R: AGCGGTACCTAATGGTGATGGTGATGATG

Further primer sequences:

T7seq: TAATACGACTCACTATAGGG
5'Prim: ACCCACTGCTTACTGGCTTATCG
Zeo2: CATGCCTGCTATTGTCTTCCC

Supplemental Table 1.
List of primers used in the generation of constructs used in this study.