

## SUPPLEMENTAL MATERIAL

Mohan et al., <http://www.jem.org/cgi/content/full/jem.20111502/DC1>**Table S1.** Evaluation of C3.G7 cell lines expressing a single peptide covalently linked to I-A<sup>g7</sup>

Cell line	Linked peptide	T cells	
		Type A	Type B
C3.G7B:9–23	SHLVEALYLVCGERG	7/7	0/6
C3.G7B:12–21	VEALYLVCGE	7/7	0/6
C3.G7B:12–20	VEALYLVCG	3/7	6/6
C3.G7B:13–21	EALYLVCGE	7/7	0/6
C3.G7B:9–20	SHLVEALYLVCG	3/7	6/6
C3.G7B:9–21	SHLVEALYLVCGE	7/7	0/6
C3.G7B:10–23	HLVEALYLVCGERG	7/7	0/6
C3.G7B:11–23	LVEALYLVCGERG	7/7	0/6
C3.G7B:12–23	VEALYLVCGERG	7/7	0/6
C3.G7B:13–23	EALYLVCGERG	7/7	0/6
C3.G7B:14–23	ALYLVCGERG	0/7	0/6

Indicated are the peptides that were covalently linked to the I-A<sup>g7</sup>  $\beta$  chain. The number of type A and type B T cell hybridomas that recognized these pMHCs is listed.

**Table S2.** Evaluation of synthetic peptides used in this study

Peptide	Sequence	Binding $\mu M$	T cells	
			Type A	Type B
B:9–23	SHLVEALYLVCGERG	1.5 ( $\pm 0.50$ )	7/7	6/6
B:12–20	VEALYLVCG	2.5 <sup>a</sup>	0/7	1/6
B:13–21	EALYLVCGE	5.9 <sup>a</sup>	0/7	0/6
Nested B:12–20	TEG <b>VEALYLVC</b> GGGS	1.4 ( $\pm 0.34$ )	1/7	6/6
Nested B:12–20 K20	TEG <b>VEALYLVC</b> KGGGS	1.6 ( $\pm 0.15$ )	0/7	0/6
Nested B:13–21	TEG <b>EALYLVC</b> GEGGS	0.7 ( $\pm 0.26$ )	7/7	0/6
Nested B:13–21 K21	TEG <b>EALYLVC</b> KGGGS	10.0 ( $\pm 2.9$ )	0/7	0/6
Nested B:14–22	TEG <b>ALYLVC</b> GERGGS	5.5 ( $\pm 1.1$ )	0/7	0/6
Nested B:12–21	GTE <b>VEALYLVC</b> GEGGS	0.5 ( $\pm 0.09$ )	7/7	6/6
Nested B:12–22	TEG <b>VEALYLVC</b> GERGGS	0.9 ( $\pm 0.16$ )	7/7	6/6

Indicated are the peptides examined, their binding as determined by IC-50% assay on soluble I-A<sup>g7</sup>, and the number of type A and type B T cell hybridomas recognizing the peptides (10  $\mu M$ ). Insulin sequences are shown in bold, and lysine substitutions are italicized.

<sup>a</sup>These values were previously determined and published (Levisetti et al., 2007).

## REFERENCE

Levisetti, M.G., A. Suri, S.J. Petzold, and E.R. Unanue. 2007. The insulin-specific T cells of nonobese diabetic mice recognize a weak MHC-binding segment in more than one form. *J. Immunol.* 178:6051–6057.