Supplementary materials

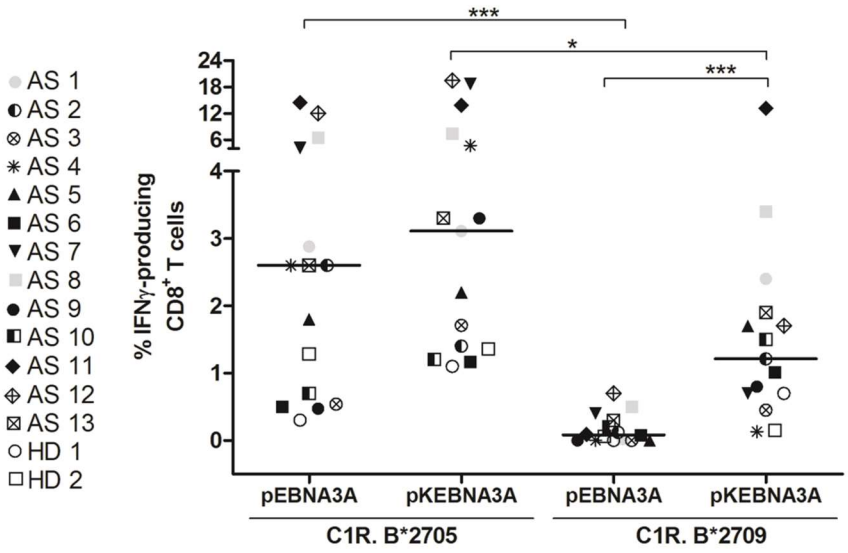

Figure S1. B*2709 allele is able to present pKEBNA3A. PBMC from 15 B*2705-positive subjects (13 patients with AS and 2 HD) were stimulated with pEBNA3A. After 12 days, their activation evaluated through the IFNγ production, was induced by re-stimulation with C1R.B*2705 or C1R.B*2709 transfectants pre-pulsed with pEBNA3A or pKEBNA3A. The percentage of IFNγ-producing CD8+ T cells was compared by Mann Whitney test; ***p value<0.001, *p value<0.05.

Table S1. Hydrogen bonds between the peptides and the HLA-B27 binding groove.

GROOVE	pEBNA3A: HLA-B*2705	pEBNA3A: HLA-B*2709	pKEBNA3A: HLA-B*2705	pKEBNA3A: HLA-B*2709	TIS: HLA-B*2705	TIS: HLA- B*2709
Thr 24					P2	P2
Glu 45	P1				P2	P2
Glu 63	P1	P1	P1, P2		P1, P2	P1, P2
Arg 62					P2	P1
Asp 77			P9	P9	P8	P9
Tyr 99					P3	P3
Lys 146					P9	P9
Trp 147				P10	P8, P9	P8
Tyr 159	P1	P1				P1
Glu 163				P2	P1	P1

On the left: amino acid residues in the binding groove involved in the H bonds. The interacting peptide residues are labeled with “P” (i.e. P1 the 1st residue, P9/P10 the last one).