

Table S4. IFN γ -responses from HLA II-typed donors to RV-specific CD4 T cell epitopes.

Peptide	Sequence	Predicted HLA II binding allele ¹		Confirmed HLA II binding allele ²		HLA II typing of the responding donors						
		DRB1	DQA1/B1	DRB1	DQA1/B1	Donor	DRB1	DRB1	DQA1	DQA1	DQB1	DQB1
RVA ₅₇₋₇₄	VKDVLEKGIPTLQSPTVE	DRB1*11:01	DQA1*01:02/B1*06:02	-	DQA1*01:02/B1*06:02	#1	07:01	11:01	01:02	03:01	03:03	03:01
						#2	07:01	11:04	02:01	05:01	02:02	03:01
						#3	03:01	11:01	03:01	05:01	02:01	03:01
RVA ₈₉₋₁₀₆	DSTITSQDVANAVVGYGV	-	DQA1*01:02/B1*06:02	DRB1*04:04 DRB1*07:01	DQA1*01:02/B1*06:02	#1	07:01	11:01	01:02	03:01	03:03	03:01
			DQA1*02:01/B1*02:02		DQA1*02:01/B1*02:02	#2	07:01	11:04	02:01	05:01	02:02	03:01
			DQA1*03:01/B1*03:01		DQA1*03:01/B1*03:01	#3	03:01	11:01	03:01	05:01	02:01	03:01
			DQA1*05:01/B1*03:01		DQA1*05:01/B1*02:01 DQA1*05:01/B1*03:01							
RVA ₉₇₋₁₁₄	VANAVVGYGVWPHYLTPE	DRB1*04:04	DQA1*01:01/B1*05:01	DRB1*08:02	DQA1*01:01/B1*05:01	#1	07:01	11:01	01:02	03:01	03:03	03:01
			DQA1*03:01/B1*03:01		DQA1*05:01/B1*02:01	#2	07:01	11:04	02:01	05:01	02:02	03:01
			DQA1*05:01/B1*03:01		DQA1*05:01/B1*03:01	#3	03:01	11:01	03:01	05:01	02:01	03:01
			DQA1*05:01/B1*04:02 DQA1*06:01/B1*04:02									
RVC ₂₅₈₋₂₇₄	INLRTNNSSTIVVPYIN	DRB1*13:02	DQA1*01:02/B1*05:01	DRB1*07:01 DRB1*09:01 DRB1*13:02	DQA1*01:02/B1*06:02 DQA1*02:01/B1*02:02	#1	07:01	11:01	01:02	03:01	03:03	03:01
			DQA1*01:02/B1*06:02			#2	07:01	11:04	02:01	05:01	02:02	03:01
			DQA1*01:03/B1*06:03									
			DQA1*02:01/B1*03:03 DQA1*05:01/B1*03:03									
RVC ₁₅₈₂₋₁₅₉₂	KEKFRDIRRFIP	DRB1*08:02	-	DRB1*08:02	-	#1	07:01	11:01	01:02	03:01	03:03	03:01
		DRB1*11:01		DRB1*11:01		#2	07:01	11:04	02:01	05:01	02:02	03:01
				DRB1*11:04		#3	03:01	11:01	03:01	05:01	02:01	03:01
RVC ₁₇₉₁₋₁₈₀₆	GLEPLDLNTSAGFPYV	DRB1*07:01	-	DRB1*09:01	DQA1*02:01/B1*02:02	#1	07:01	11:01	01:02	03:01	03:03	03:01
		DRB1*09:01		#2		07:01	11:04	02:01	05:01	02:02	03:01	
		DRB1*13:02		#3		03:01	11:01	03:01	05:01	02:01	03:01	
RVC ₁₈₃₅₋₁₈₄₇	DLPYVTYLKDELRL	-	DQA1*02:01/B1*02:02	DRB1*04:04	DQA1*05:01/B1*02:01	#2	07:01	11:04	02:01	05:01	02:02	03:01
			DQA1*05:01/B1*02:01			#3	03:01	11:01	03:01	05:01	02:01	03:01

¹ HLA I molecules predicted to bind the corresponding peptides as retrieved by RANKPEP and NETMHCII servers. ² HLA II molecule experimentally confirmed to bind the peptide with a high binding affinity (IC₅₀ < 1000 nM). HLA II molecules matching any of the alleles expressed by the responding donors are highlighted in bold.