

Table S3. Binding affinity data of RV peptides to HLA II molecules

Peptide	Sequence	HLA II molecule	IC50 nM	SD
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*01:01/DQB1*05:01	34764	1.2
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*01:02/DQB1*06:02	71	1.2
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*02:01/DQB1*02:02	3079	1.1
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*05:01/DQB1*02:01	27211	1.2
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*05:01/DQB1*03:01	14753	1.4
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*04:04	4103	1.2
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*08:02	38898	1.0
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*09:01	9537	1.1
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*11:01	38843	1.0
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*01:01/DQB1*05:01	7560	2.0
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*01:02/DQB1*06:02	33	1.2
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*02:01/DQB1*02:02	515	1.4
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*03:01/DQB1*03:01	761	1.1
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*05:01/DQB1*02:01	907	1.1
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DQA1*05:01/DQB1*03:01	68	1.1
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*04:04	19	2.0
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*07:01	865	1.2
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*08:02	5165	1.1
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*09:01	1198	1.2
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*11:01	34921	1.2
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*11:04	5822	1.5
RVA 89-106	DSTITSQDVANAVVGYG	HLA-DRB1*13:02	6651	1.1
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*01:01/DQB1*05:01	20	1.3
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*01:02/DQB1*06:02	6407	1.3
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*02:01/DQB1*02:02	33942	1.2
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*03:01/DQB1*03:01	2254	1.1
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*05:01/DQB1*02:01	270	1.7
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DQA1*05:01/DQB1*03:01	724	1.2
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*04:04	5582	1.1
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*07:01	1303	1.2
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*08:02	453	1.3
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*09:01	11527	1.1
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*11:01	1100	1.3
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*11:04	19653	1.0
RVA 97-114	VANAVVGYGVPWPHYLTP	HLA-DRB1*13:02	11594	1.1
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*01:01/DQB1*05:01	5202	2.9
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*01:02/DQB1*06:02	67	1.4
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*02:01/DQB1*02:02	434	1.2
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*03:01/DQB1*03:01	70047	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*05:01/DQB1*02:01	19055	2.4
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*04:04	3428	1.6
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*07:01	411	1.3
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*09:01	840	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*13:02	40	1.2
RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*01:01/DQB1*05:01	2949	2.6
RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*02:01/DQB1*02:02	33511	1.1

RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*05:01/DQB1*02:01	7433	1.3
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*04:04	8683	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*07:01	12973	1.3
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*08:02	44	1.3
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*09:01	2730	1.2
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*11:01	33	1.1
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*11:04	101	1.4
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*01:02/DQB1*06:02	1920	1.1
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*02:01/DQB1*02:02	191	1.3
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*03:01/DQB1*03:01	10388	1.2
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*05:01/DQB1*02:01	12364	1.7
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*05:01/DQB1*03:01	1817	1.4
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*03:01	8399	1.1
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*04:04	1095	1.1
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*07:01	1198	1.1
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*09:01	7,6	1.5
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*13:02	62	1.1
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*01:01/DQB1*05:01	12717	3.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*02:01/DQB1*02:02	5668	1.1
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*05:01/DQB1*02:01	171	1.3
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*04:04	773	1.4
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*08:02	2596	1.2
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DQA1*03:01/DQB1*03:01	70047	1.0
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*03:01	48915	1.0
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*07:01	48915	1.0
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*11:04	48915	1.0
RVA 57-74	VKDVLEKGIPTLQSPTVE	HLA-DRB1*13:02	48915	1.0
RVA 89-106	DSTITSQDVANAVVGYGV	HLA-DRB1*03:01	48915	1.0
RVA 97-114	VANAVVGYGVWPHYLTPE	HLA-DRB1*03:01	48915	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DQA1*05:01/DQB1*03:01	70047	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*03:01	41204	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*08:02	40943	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*11:01	41204	1.0
RVC 258-274	INLRTNNSSTIVVPYIN	HLA-DRB1*11:04	41204	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*01:02/DQB1*06:02	57220	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*03:01/DQB1*03:01	70047	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DQA1*05:01/DQB1*03:01	70047	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*03:01	58372	1.0
RVC 1582-1592	KEKFRDIRRFIP	HLA-DRB1*13:02	58372	1.0
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DQA1*01:01/DQB1*05:01	43779	1.0
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*08:02	43779	1.0
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*11:01	43779	1.0
RVC 1791-1806	GLEPLDLNTSAGFPYV	HLA-DRB1*11:04	43779	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*01:02/DQB1*06:02	51989	1.1
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*03:01/DQB1*03:01	70047	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DQA1*05:01/DQB1*03:01	70047	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*03:01	53882	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*07:01	53882	1.0

RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*09:01	53882	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*11:01	53882	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*11:04	53882	1.0
RVC 1835-1847	DLPYVTYLKDEL	HLA-DRB1*13:02	53882	1.0

Table reports mean IC50 values and standard deviations (SD) determined by competitive binding assays using the specified peptides and HLA II molecules. The table is sorted to show at the top the values plotted in Figure 3; the shaded cells at the bottom of the table are values not included in the figure (IC50 > 40000 nM). SD values are geometric.