

MHC Class-II Binding Peptide Prediction Results

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INPUT & PARAMETER INFORMATION

Antigen Name	test
Scanned on	Thu Feb 25 23:19:05 2010
Length of input sequence	461 amino acids
Number of nanomers from input sequence	453
Number of nanomers with obligatory P1 anchor residue	122
Threshold setting	3
Number of alleles in query	51
Number of top scorers to be displayed	46

ALLELE: DRB1_0101	Threshold for 3 % with score: 0.14	Highest Score achievable by any peptide: 6
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVGLTAATV	441	2.5000	41.67
2	YVLSVASLT	280	2.0000	33.33
3	YVSGVAALV	346	1.9000	31.67
4	VRRLTATAH	367	1.7900	29.83
5	FACLAATVV	5	1.2900	21.50
6	IRAAFACLA	1	1.2000	20.00
7	YPGLNATEV	358	0.9900	16.50
8	WVGIAAPGE	302	0.9700	16.17

9	WAGVTSVSI	265	0.9500	15.83
10	LVALSGTSY	334	0.8900	14.83
11	FAGAAALSV	432	0.8000	13.33
12	LLSIRAMST	151	0.5900	9.83
13	IVGAGNLDA	384	0.5000	8.33
14	VAVLAGAIV	179	0.4000	6.67
15	IRAMSTKFS	154	0.3000	5.00
16	VAFAGAAAL	430	0.3000	5.00
17	MVDQAALGA	210	0.2000	3.33
18	IVAAAGNTG	231	0.1000	1.67
19	LSVLVGLTA	438	0.1000	1.67
20	VINVSTITC	196	-0.0500	0
21	FSRGEGQLV	82	-0.1000	0
22	MLNLPAAWQ	73	-0.2000	0
23	LVRSRYPGL	353	-0.3300	0
24	VGLTAATVA	442	-0.4100	0
25	VLSVASLTS	281	-0.4500	0
26	VSTITCLPA	199	-0.5000	0
27	WAIGPPVVD	23	-0.6000	0
28	VIVAAAGNT	230	-0.7000	0
29	LVAIIDTGV	89	-0.7100	0
30	MIRAAFACL	0	-0.8000	0
31	VVDAAAQPP	29	-1.1000	0
32	IVHAADLGA	186	-1.1000	0
33	WQFSRGEGQ	80	-1.2000	0
34	FSGVAPAAR	142	-1.3500	0
35	WWTPPAWAI	17	-1.3800	0
36	VGIAAPGEN	303	-1.5000	0
37	VVRRLTATA	366	-1.5000	0
38	LNLPAAWQF	74	-1.5800	0
39	VLVGLTAAT	440	-1.6000	0
40	VAPMEQRGA	44	-1.6100	0
41	VAGQPGNDG	133	-1.7000	0
42	YAAGYVSGV	342	-1.7000	0

43	INVSTITCL	197	-1.7100	0
44	LAGAIVHAA	182	-1.8000	0
45	LGAAIRYAA	216	-1.8000	0

ALLELE: DRB1_0102	Threshold for 3 % with score: 0.7	Highest Score achievable by any peptide: 6
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVGLTAATV	441	3.5000	58.33
2	VRRLTATAH	367	2.7900	46.50
3	IRAAFACLA	1	2.2000	36.67
4	LVALSGTSY	334	1.8900	31.50
5	LLSIRAMST	151	1.5900	26.50
6	IVGAGNLDA	384	1.5000	25.00
7	VAVLAGAIV	179	1.4000	23.33
8	IRAMSTKFS	154	1.3000	21.67
9	VAFAGAAAL	430	1.3000	21.67
10	FACLAATVV	5	1.2900	21.50
11	MVDQAALGA	210	1.2000	20.00
12	IVAAAGNTG	231	1.1000	18.33
13	LSVLVGLTA	438	1.1000	18.33
14	YVLSVASLT	280	1.0000	16.67
15	VINVSTITC	196	0.9500	15.83
16	YVSGVAALV	346	0.9000	15.00
17	MLNLPAAWQ	73	0.8000	13.33
18	FAGAAALSV	432	0.8000	13.33
19	LVRSRYPGL	353	0.6700	11.17
20	VGLTAATVA	442	0.5900	9.83
21	VLSVASLTS	281	0.5500	9.17
22	VSTITCLPA	199	0.5000	8.33
23	VIVAAAGNT	230	0.3000	5.00
24	LVAIIDTGV	89	0.2900	4.83
25	MIRAAFACL	0	0.2000	3.33
26	YPGLNATEV	358	-0.0100	0

27	WVGIAAPGE	302	-0.0300	0
28	WAGVTSVSI	265	-0.0500	0
29	VVDAAAQPP	29	-0.1000	0
30	FSRGEGQLV	82	-0.1000	0
31	IVHAADLGA	186	-0.1000	0
32	VGIAAPGEN	303	-0.5000	0
33	VVRRLTATA	366	-0.5000	0
34	LNLPAAWQF	74	-0.5800	0
35	VLVGLTAAT	440	-0.6000	0
36	VAPMEQRGA	44	-0.6100	0
37	VAGQPGNDG	133	-0.7000	0
38	INVSTITCL	197	-0.7100	0
39	LAGAIVHAA	182	-0.8000	0
40	LGAAIRYAA	216	-0.8000	0
41	VSGVAALVR	347	-0.8500	0
42	VLAGAIVHA	181	-0.9000	0
43	VVVAGWWTP	12	-0.9800	0
44	VAAAGNTGA	232	-1.0100	0
45	ITCLPADRM	202	-1.0200	0

ALLELE: DRB1_0301	Threshold for 3 % with score: 2.96	Highest Score achievable by any peptide: 9.5
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	3.6000	37.89
2	IRAMSTKFS	154	3.2000	33.68
3	IRYAAVDKD	220	3.0000	31.58
4	VINVSTITC	196	2.8000	29.47
5	LVRSRYPGL	353	2.7600	29.05
6	VAIIDTGVQ	90	2.7000	28.42
7	VQPGPRLPN	97	2.6000	27.37
8	IVAGQPGND	132	2.6000	27.37
9	VAPAARLLS	145	2.6000	27.37
10	VDKDAVIVA	225	2.6000	27.37

11	VVRRLTATA	366	2.6000	27.37
12	LVGLTAATV	441	2.6000	27.37
13	VALSGTSYA	335	2.5700	27.05
14	INVSTITCL	197	2.5600	26.95
15	VLGAIVHA	181	2.4000	25.26
16	VLSVASLTS	281	2.4000	25.26
17	YVLSVASLT	280	2.3700	24.95
18	LLSIRAMST	151	2.3000	24.21
19	VRRLTATAH	367	2.3000	24.21
20	VLVGLTAAT	440	2.3000	24.21
21	IRAAFACLA	1	2.2000	23.16
22	WVGIAAPGE	302	2.2000	23.16
23	YVSGVAALV	346	2.1000	22.11
24	VGIAAPGEN	303	2.0000	21.05
25	IVGAGNLDA	384	1.9000	20.00
26	IVAAAGNTG	231	1.7100	18.00
27	LNATEVVRR	361	1.7000	17.89
28	LVALSGTSY	334	1.6000	16.84
29	LGAAIRYAA	216	1.4500	15.26
30	VRSRYPGLN	354	1.4000	14.74
31	VAALVRSRY	350	1.3700	14.42
32	MLNLPAAWQ	73	1.3000	13.68
33	VAIARRRRE	449	1.3000	13.68
34	LGAKVINVS	192	1.2100	12.74
35	VIVAAAGNT	230	1.2000	12.63
36	LTAATVAIA	444	1.2000	12.63
37	WAIGPPVVD	23	1.1000	11.58
38	LNLPAAWQF	74	1.1000	11.58
39	YAAGYVSGV	342	1.0700	11.26
40	MVDQAALGA	210	1.0000	10.53
41	VHAADLGAK	187	0.9000	9.47
42	LPADRMVDQ	205	0.9000	9.47
43	VGAGNLDAV	385	0.9000	9.47
44	LAATVVVAG	8	0.8000	8.42

45	VVAGWWTPP	13	0.8000	8.42
46	VAFAGAAAL	430	0.7600	8.00

ALLELE: DRB1_0305	Threshold for 3 % with score: 1.7	Highest Score achievable by any peptide: 9.1
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	3.3000	36.26
2	YVLSVASLT	280	2.6700	29.34
3	VAIIDTGVQ	90	2.4000	26.37
4	WQFSRGEQ	80	2.3000	25.27
5	YVSGVAALV	346	2.1000	23.08
6	VRRLTATAH	367	1.8800	20.66
7	IRAMSTKFS	154	1.8000	19.78
8	VINVSTITC	196	1.8000	19.78
9	WVGIAAPGE	302	1.8000	19.78
10	VDKDAVIVA	225	1.6000	17.58
11	VVRRLTATA	366	1.6000	17.58
12	VALSGTSYA	335	1.5700	17.25
13	VLGAIVHA	181	1.4000	15.38
14	IRAAFACLA	1	1.2000	13.19
15	VAPAARLLS	145	1.2000	13.19
16	YAAGYVSGV	342	1.0700	11.76
17	WAIGPPVVD	23	1.0000	10.99
18	MLNLPAAWQ	73	1.0000	10.99
19	VLSVASLTS	281	1.0000	10.99
20	IRYAAVDKD	220	0.9000	9.89
21	IVGAGNLDA	384	0.9000	9.89
22	VQPGPRLPN	97	0.8000	8.79
23	LVRSRYPGL	353	0.8000	8.79
24	WQPYVLSVA	277	0.7700	8.46
25	LLSIRAMST	151	0.6000	6.59
26	INVSTITCL	197	0.6000	6.59
27	LPADRMVDQ	205	0.6000	6.59

28	VLVGLTAAT	440	0.6000	6.59
29	LVGLTAATV	441	0.6000	6.59
30	IVAGQPGND	132	0.5000	5.49
31	LGAAIRYAA	216	0.4500	4.95
32	VGIAAPGEN	303	0.2000	2.20
33	LTAATVAIA	444	0.2000	2.20
34	LANGLPDAH	323	-0.0200	0
35	LGAKVINVS	192	-0.1900	0
36	VHAADLGAK	187	-0.2000	0
37	VAGWWTPPA	14	-0.3000	0
38	FAGAAALSV	432	-0.3000	0
39	LAGAIVHAA	182	-0.4000	0
40	VTSVSIPSW	268	-0.4000	0
41	WWQPYVLSV	276	-0.4000	0
42	VASLTSAGQ	284	-0.4000	0

ALLELE: DRB1_0306	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	4.3000	48.86
2	IRAMSTKFS	154	3.4000	38.64
3	VRRLTATAH	367	2.8800	32.73
4	VAPAARLLS	145	2.7000	30.68
5	VRRRLTATA	366	2.6000	29.55
6	VLSVASLTS	281	2.5000	28.41
7	VINVSTITC	196	2.4800	28.18
8	IVGAGNLDA	384	2.4000	27.27
9	VQPGPRLPN	97	2.3000	26.14
10	VALSGTSYA	335	2.3000	26.14
11	VLGAIVHA	181	2.2800	25.91
12	VDKDAVIVA	225	2.2800	25.91
13	IRAAFACLA	1	2.2000	25.00
14	IRYAAVDKD	220	2.2000	25.00

15	MLNLPAAWQ	73	2.0000	22.73
16	VAIIDTGVQ	90	2.0000	22.73
17	WQFSRGEGQ	80	1.7000	19.32
18	INVSTITCL	197	1.6000	18.18
19	VLVGLTAAT	440	1.6000	18.18
20	LVGLTAATV	441	1.6000	18.18
21	LGAKVINVS	192	1.5000	17.05
22	MVDQAALGA	210	1.5000	17.05
23	LPADRMVDQ	205	1.4800	16.82
24	LAGAIVHAA	182	1.4000	15.91
25	YVLSVASLT	280	1.4000	15.91
26	LLSIRAMST	151	1.3000	14.77
27	LANGLPDAH	323	1.2800	14.55
28	LTAATVAIA	444	1.2000	13.64
29	YVSGVAALV	346	1.1000	12.50
30	IVAAAGNTG	231	1.0000	11.36
31	VSTITCLPA	199	0.9000	10.23
32	IGPPVVDAA	25	0.7000	7.95
33	IVHAADLGA	186	0.6000	6.82
34	VASLTSAGQ	284	0.6000	6.82
35	LVRSRYPGL	353	0.4000	4.55
36	VGLTAATVA	442	0.4000	4.55
37	LGAAIRYAA	216	0.3000	3.41
38	LSVASL TSA	282	0.3000	3.41
39	LVALSGTSY	334	0.3000	3.41
40	VGAGNLDAV	385	0.2000	2.27
41	LSVLVGLTA	438	0.2000	2.27
42	IVAGQPGND	132	0.1000	1.14
43	LNATEV VRR	361	0.0800	0.91
44	LAQATLDVA	172	-0.1000	0
45	WAIGPPVVD	23	-0.1200	0

ALLELE: DRB1_0307 Threshold for 3 % with score: Highest Score achievable by any peptide:

2.08

8.8

Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	4.3000	48.86
2	IRAMSTKFS	154	3.4000	38.64
3	VRRLTATAH	367	2.8800	32.73
4	VAPAAARLLS	145	2.7000	30.68
5	VVRRLTATA	366	2.6000	29.55
6	VLSVASLTS	281	2.5000	28.41
7	VINVSTITC	196	2.4800	28.18
8	IVGAGNLDA	384	2.4000	27.27
9	VQPGPRLPN	97	2.3000	26.14
10	VALSGTSYA	335	2.3000	26.14
11	VLAGAIVHA	181	2.2800	25.91
12	VDKDAVIVA	225	2.2800	25.91
13	IRAAFACLA	1	2.2000	25.00
14	IRYAAVDKD	220	2.2000	25.00
15	MLNLPAAWQ	73	2.0000	22.73
16	VAIIDTGVQ	90	2.0000	22.73
17	WQFSRGEQ	80	1.7000	19.32
18	INVSTITCL	197	1.6000	18.18
19	VLVGLTAAT	440	1.6000	18.18
20	LVGLTAATV	441	1.6000	18.18
21	LGAKVINVS	192	1.5000	17.05
22	MVDQAALGA	210	1.5000	17.05
23	LPADRMVDQ	205	1.4800	16.82
24	LAGAIVHAA	182	1.4000	15.91
25	YVLSVASLT	280	1.4000	15.91
26	LLSIRAMST	151	1.3000	14.77
27	LANGLPDAH	323	1.2800	14.55
28	LTAATVAIA	444	1.2000	13.64
29	YVSGVAALV	346	1.1000	12.50
30	IVAAAGNTG	231	1.0000	11.36
31	VSTITCLPA	199	0.9000	10.23
32	IGPPVVDAA	25	0.7000	7.95

33	IVHAADLGA	186	0.6000	6.82
34	VASLTSAGQ	284	0.6000	6.82
35	LVRSRYPGL	353	0.4000	4.55
36	VGLTAATVA	442	0.4000	4.55
37	LGAAIRYAA	216	0.3000	3.41
38	LSVASLTS	282	0.3000	3.41
39	LVALSGTSY	334	0.3000	3.41
40	VGAGNLDAV	385	0.2000	2.27
41	LSVLVGLTA	438	0.2000	2.27
42	IVAGQPGND	132	0.1000	1.14
43	LNATEVVRR	361	0.0800	0.91
44	LAQATLDVA	172	-0.1000	0
45	WAIGPPVVD	23	-0.1200	0

ALLELE: DRB1_0308		Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8	
Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	4.3000	48.86
2	IRAMSTKFS	154	3.4000	38.64
3	VRRLTATAH	367	2.8800	32.73
4	VAPAARLLS	145	2.7000	30.68
5	VVRRLTATA	366	2.6000	29.55
6	VLSVASLTS	281	2.5000	28.41
7	VINVSTITC	196	2.4800	28.18
8	IVGAGNLDA	384	2.4000	27.27
9	VQPGPRLPN	97	2.3000	26.14
10	VALSGTSYA	335	2.3000	26.14
11	VLAGAIVHA	181	2.2800	25.91
12	VDKDAVIVA	225	2.2800	25.91
13	IRAAFACLA	1	2.2000	25.00
14	IRYAAVDKD	220	2.2000	25.00
15	MLNLPAAWQ	73	2.0000	22.73
16	VAIIDTGVQ	90	2.0000	22.73

17	WQFSRGEQ	80	1.7000	19.32
18	INVSTITCL	197	1.6000	18.18
19	VLVGLTAAT	440	1.6000	18.18
20	LVGLTAATV	441	1.6000	18.18
21	LGAKVINVS	192	1.5000	17.05
22	MVDQAALGA	210	1.5000	17.05
23	LPADRMVDQ	205	1.4800	16.82
24	LAGAIVHAA	182	1.4000	15.91
25	YVLSVASLT	280	1.4000	15.91
26	LLSIRAMST	151	1.3000	14.77
27	LANGLPDAH	323	1.2800	14.55
28	LTAATVAIA	444	1.2000	13.64
29	YVSGVAALV	346	1.1000	12.50
30	IVAAAGNTG	231	1.0000	11.36
31	VSTITCLPA	199	0.9000	10.23
32	IGPPVVDAA	25	0.7000	7.95
33	IVHAADLGA	186	0.6000	6.82
34	VASLTSAGQ	284	0.6000	6.82
35	LVRSRYPGL	353	0.4000	4.55
36	VGLTAATVA	442	0.4000	4.55
37	LGAAIRYAA	216	0.3000	3.41
38	LSVASL TSA	282	0.3000	3.41
39	LVALSGTSY	334	0.3000	3.41
40	VGAGNLDAV	385	0.2000	2.27
41	LSVLVGLTA	438	0.2000	2.27
42	IVAGQPGND	132	0.1000	1.14
43	LNATEVVRR	361	0.0800	0.91
44	LAQATLDVA	172	-0.1000	0
45	WAIGPPVVD	23	-0.1200	0

ALLELE: DRB1_0309	Threshold for 3 % with score: 2.4	Highest Score achievable by any peptide: 9.5		
Rank	Sequence	At Position	Score	% of Highest Score

1	YVLSVASLT	280	3.3700	35.47
2	WVGIAAPGE	302	3.2000	33.68
3	YVSGVAALV	346	3.1000	32.63
4	LVAGIVAGQ	128	2.6000	27.37
5	IRAMSTKFS	154	2.2000	23.16
6	WAIGPPVVD	23	2.1000	22.11
7	YAAGYVSGV	342	2.0700	21.79
8	IRYAAVDKD	220	2.0000	21.05
9	VINVSTITC	196	1.8000	18.95
10	LVRSRYPGL	353	1.7600	18.53
11	VAIIDTGVQ	90	1.7000	17.89
12	WQFSRGEQ	80	1.6000	16.84
13	VQPGPRLPN	97	1.6000	16.84
14	IVAGQPGND	132	1.6000	16.84
15	VAPAARLLS	145	1.6000	16.84
16	VDKDAVIVA	225	1.6000	16.84
17	VVRRLTATA	366	1.6000	16.84
18	LVGLTAATV	441	1.6000	16.84
19	VALSGTSYA	335	1.5700	16.53
20	INVSTITCL	197	1.5600	16.42
21	VLGAIVHA	181	1.4000	14.74
22	VLSVASLTS	281	1.4000	14.74
23	LLSIRAMST	151	1.3000	13.68
24	VRRLTATAH	367	1.3000	13.68
25	VLVGLTAAT	440	1.3000	13.68
26	IRAAFACLA	1	1.2000	12.63
27	YAAVDKDAV	222	1.0000	10.53
28	VGIAAPGEN	303	1.0000	10.53
29	FSGVAPAAR	142	0.9000	9.47
30	WAGVTSVSI	265	0.9000	9.47
31	IVGAGNLDA	384	0.9000	9.47
32	WQLPAEPGG	398	0.9000	9.47
33	WQPYVLSVA	277	0.7700	8.11
34	IVAAAGNTG	231	0.7100	7.47

35	LNATEVVRR	361	0.7000	7.37
36	FAGAAALSV	432	0.7000	7.37
37	WWQPYVLSV	276	0.6000	6.32
38	LVALSGTSY	334	0.6000	6.32
39	LGAAIRYAA	216	0.4500	4.74
40	FSRGEGQLV	82	0.4000	4.21
41	FSMPGPWVG	296	0.4000	4.21
42	VRSRYPGLN	354	0.4000	4.21
43	VAALVRSRY	350	0.3700	3.89
44	MLNLPAAWQ	73	0.3000	3.16
45	VAIARRRRE	449	0.3000	3.16
46	LGAKVINVS	192	0.2100	2.21

ALLELE: DRB1_0311	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	4.3000	48.86
2	IRAMSTKFS	154	3.4000	38.64
3	VRRLTATAH	367	2.8800	32.73
4	VAPAARLLS	145	2.7000	30.68
5	VVRRLTATA	366	2.6000	29.55
6	VLSVASLTS	281	2.5000	28.41
7	VINVSTITC	196	2.4800	28.18
8	IVGAGNLDA	384	2.4000	27.27
9	VQPGPRLPN	97	2.3000	26.14
10	VALSGTSYA	335	2.3000	26.14
11	VLGAIVHA	181	2.2800	25.91
12	VDKDAVIVA	225	2.2800	25.91
13	IRAAFACLA	1	2.2000	25.00
14	IRYAAVDKD	220	2.2000	25.00
15	MLNLPAAWQ	73	2.0000	22.73
16	VAIIDTGVQ	90	2.0000	22.73
17	WQFSRGEGQ	80	1.7000	19.32

18	INVSTITCL	197	1.6000	18.18
19	VLVGLTAAT	440	1.6000	18.18
20	LVGLTAATV	441	1.6000	18.18
21	LGAKVINVS	192	1.5000	17.05
22	MVDQAALGA	210	1.5000	17.05
23	LPADRMVDQ	205	1.4800	16.82
24	LAGAIVHAA	182	1.4000	15.91
25	YVLSVASLT	280	1.4000	15.91
26	LLSIRAMST	151	1.3000	14.77
27	LANGLPDAH	323	1.2800	14.55
28	LTAATVAIA	444	1.2000	13.64
29	YVSGVAALV	346	1.1000	12.50
30	IVAAAGNTG	231	1.0000	11.36
31	VSTITCLPA	199	0.9000	10.23
32	IGPPVVDAA	25	0.7000	7.95
33	IVHAADLGA	186	0.6000	6.82
34	VASLTSAGQ	284	0.6000	6.82
35	LVRSRYPGL	353	0.4000	4.55
36	VGLTAATVA	442	0.4000	4.55
37	LGAAIRYAA	216	0.3000	3.41
38	LSVASL TSA	282	0.3000	3.41
39	LVALSGTSY	334	0.3000	3.41
40	VGAGNLDAV	385	0.2000	2.27
41	LSVLVGLTA	438	0.2000	2.27
42	IVAGQPGND	132	0.1000	1.14
43	LNATEVVRR	361	0.0800	0.91
44	LAQATLDVA	172	-0.1000	0
45	WAIGPPVVD	23	-0.1200	0

ALLELE: DRB1_0401	Threshold for 3 % with score: 1.48	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.4000	51.16

2	IVGAGNLDA	384	3.3000	38.37
3	VRRLTATAH	367	2.6800	31.16
4	YVLSVASLT	280	2.5000	29.07
5	VALSGTSYA	335	2.5000	29.07
6	VAIIDTGVQ	90	2.4000	27.91
7	WQFSRGEGQ	80	2.0000	23.26
8	MLNLPAAWQ	73	1.8000	20.93
9	VVRRLTATA	366	1.8000	20.93
10	VLSVASLTS	281	1.7000	19.77
11	VINVSTITC	196	1.6800	19.53
12	VASLTSAGQ	284	1.5000	17.44
13	LVGLTAATV	441	1.4000	16.28
14	MVDQAALGA	210	1.3000	15.12
15	IRAAFACLA	1	1.2000	13.95
16	VGLTAATVA	442	1.1000	12.79
17	LVAGIVAGQ	128	0.9000	10.47
18	IVHAADLGA	186	0.9000	10.47
19	IRYAAVDKD	220	0.9000	10.47
20	WVGIAAPGE	302	0.7000	8.14
21	LLSIRAMST	151	0.6000	6.98
22	LNATEVVRR	361	0.4800	5.58
23	VSTITCLPA	199	0.2000	2.33
24	VAAAGNTGA	232	0.2000	2.33
25	FAGAAALSV	432	0.2000	2.33
26	LAGAIVHAA	182	0.1000	1.16
27	VDKDAVIVA	225	0.0800	0.93
28	WAGVTSVSI	265	0.0800	0.93
29	INVSTITCL	197	-0.1000	0
30	LTAATVAIA	444	-0.1000	0
31	YPGLNATEV	358	-0.3000	0
32	LAATVVVAG	8	-0.3200	0
33	VLVGLTAAT	440	-0.4000	0
34	IIDTGVQPG	92	-0.6000	0
35	LVRSRYPGL	353	-0.6000	0

36	LPADRMVDQ	205	-0.6200	0
37	LVALSGTSY	334	-0.7000	0
38	VAGWWTPPA	14	-0.8000	0
39	IVAAAGNTG	231	-0.8000	0
40	WWQPYVLSV	276	-0.8000	0
41	LSVLVGLTA	438	-0.8000	0
42	ITCLPADRM	202	-0.9000	0

ALLELE: DRB1_0402	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 9.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	5.7000	59.38
2	IRAMSTKFS	154	5.4000	56.25
3	IVGAGNLDA	384	4.6000	47.92
4	VINVSTITC	196	3.3000	34.38
5	VLSVASLTS	281	3.2000	33.33
6	LVAGIVAGQ	128	2.8000	29.17
7	VAGWWTPPA	14	2.7000	28.13
8	VRRLTATAH	367	2.4800	25.83
9	IRAAFACLA	1	2.2000	22.92
10	IVHAADLGA	186	2.2000	22.92
11	VAIIDTGVQ	90	1.8800	19.58
12	LGAKVINVS	192	1.8000	18.75
13	VVVAGWWTP	12	1.7000	17.71
14	LAGAIVHAA	182	1.6000	16.67
15	VALSGTSYA	335	1.5000	15.62
16	VLVGLTAAT	440	1.5000	15.62
17	MLNLPAAWQ	73	1.4000	14.58
18	MVDQAALGA	210	1.4000	14.58
19	VAAAGNTGA	232	1.4000	14.58
20	VAPMEQRGA	44	1.1000	11.46
21	VASLTSAGQ	284	1.1000	11.46
22	VGLTAATVA	442	1.1000	11.46

23	LVGLTAATV	441	1.0000	10.42
24	LNLPAAWQF	74	0.9000	9.38
25	LTAATVAIA	444	0.9000	9.38
26	LLSIRAMST	151	0.8800	9.17
27	VSTITCLPA	199	0.7800	8.12
28	VVDAAAQPP	29	0.6000	6.25
29	LVAIIDTGV	89	0.4800	5.00
30	MEQRGACSV	47	0.4000	4.17
31	LSIRAMSTK	152	0.4000	4.17
32	VLGAIVHA	181	0.4000	4.17
33	LNATEVVRR	361	0.4000	4.17
34	IIDTGVQPG	92	0.3000	3.12
35	IVAAAGNTG	231	0.2000	2.08
36	IRYAAVDKD	220	0.1000	1.04
37	YVSGVAALV	346	-0.1000	0
38	VRSRYPGLN	354	-0.1000	0
39	LTATAHRGA	370	-0.2000	0
40	VAFAGAAAL	430	-0.2000	0
41	MIRAAFACL	0	-0.3000	0
42	LAATVVVAG	8	-0.4000	0
43	VAPAARLLS	145	-0.4000	0
44	YVLSVASLT	280	-0.5000	0
45	FAGAAALSV	432	-0.5000	0

ALLELE: DRB1_0404	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	5.3000	60.23
2	VRRLTATAH	367	4.3800	49.77
3	VINVSTITC	196	4.0800	46.36
4	IVGAGNLDA	384	3.9000	44.32
5	VAIIDTGVQ	90	3.8000	43.18
6	VLSVASLTS	281	3.7000	42.05

7	MLNLPAAWQ	73	3.0000	34.09
8	VASLTSAGQ	284	2.7000	30.68
9	VALSGTSYA	335	2.7000	30.68
10	LVGLTAATV	441	2.6000	29.55
11	VVRRLTATA	366	2.3000	26.14
12	IRAAFACLA	1	2.2000	25.00
13	LVAIIDTGV	89	1.8000	20.45
14	LLSIRAMST	151	1.8000	20.45
15	VAAAGNTGA	232	1.7000	19.32
16	IVHAADLGA	186	1.5000	17.05
17	LVAGIVAGQ	128	1.1000	12.50
18	VSTITCLPA	199	1.1000	12.50
19	MVDQAALGA	210	1.1000	12.50
20	VAGWWTPPA	14	1.0500	11.93
21	IRYAAVDKD	220	1.0000	11.36
22	LVALSGTSY	334	1.0000	11.36
23	VGLTAATVA	442	1.0000	11.36
24	LTAATVAIA	444	0.9000	10.23
25	IASVSNSGD	312	0.8000	9.09
26	LAGAIVHAA	182	0.7000	7.95
27	YVLSVASLT	280	0.7000	7.95
28	LGAKVINVS	192	0.3000	3.41
29	IVAAAGNTG	231	0.3000	3.41
30	WAGVTSVSI	265	0.3000	3.41
31	INVSTITCL	197	-0.1000	0
32	VAFAGAAAL	430	-0.2000	0
33	VLVGLTAAT	440	-0.2000	0
34	MIRAAFACL	0	-0.3000	0
35	FACLAATVV	5	-0.3000	0
36	VAPMEQRGA	44	-0.3000	0
37	WVGIAAPGE	302	-0.3000	0
38	VSGVAALVR	347	-0.3000	0
39	LNATEVRRR	361	-0.3000	0
40	VVVAGWWTP	12	-0.4000	0

41	WQPYVLSVA	277	-0.5000	0
42	LSVASL TSA	282	-0.5000	0
43	ITCLPADRM	202	-0.6000	0
44	VGIAAPGEN	303	-0.6000	0

ALLELE: DRB1_0405	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 9.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	VRRLTATAH	367	4.6000	48.94
2	IRAMSTKFS	154	4.3000	45.74
3	WVGIAAPGE	302	3.7000	39.36
4	VAIIDTGVQ	90	3.6000	38.30
5	VINVSTITC	196	3.0800	32.77
6	IVGAGNLDA	384	2.9000	30.85
7	MLNLPAAWQ	73	2.8000	29.79
8	IRYAAVDKD	220	2.7000	28.72
9	VLSVASLTS	281	2.7000	28.72
10	YVLSVASLT	280	2.6000	27.66
11	VASLTSAGQ	284	2.5000	26.60
12	IASVSNSGD	312	2.5000	26.60
13	LVGLTAATV	441	1.9000	20.21
14	LLSIRAMST	151	1.7000	18.09
15	VALSGT SYA	335	1.7000	18.09
16	WAGVTSVSI	265	1.5000	15.96
17	VVRRLTATA	366	1.3000	13.83
18	IRAAFACLA	1	1.2000	12.77
19	LVAIIDTGV	89	1.1000	11.70
20	LVALSGT SY	334	1.1000	11.70
21	FACLAATVV	5	1.0000	10.64
22	LVAGIVAGQ	128	0.9000	9.57
23	VAAAGNTGA	232	0.7000	7.45
24	YPGLNATEV	358	0.7000	7.45
25	IVAAAGNTG	231	0.6000	6.38

26	IVHAADLGA	186	0.5000	5.32
27	WQPYVLSVA	277	0.5000	5.32
28	WQFSRGEGQ	80	0.4000	4.26
29	VGIAAPGEN	303	0.4000	4.26
30	VSTITCLPA	199	0.1000	1.06
31	MVDQAALGA	210	0.1000	1.06
32	FAGAAALSV	432	0.1000	1.06
33	VAGWWTPPA	14	0.0500	0.53
34	INVSTITCL	197	-0.1000	0
35	LTAATVAIA	444	-0.1000	0
36	VAFAGAAAL	430	-0.2000	0
37	MIRAAFACL	0	-0.3000	0
38	LAGAIVHAA	182	-0.3000	0
39	VLVGLTAAT	440	-0.3000	0
40	ITCLPADRM	202	-0.5000	0
41	YVSGVAALV	346	-0.5000	0
42	FSGVAPAAR	142	-0.6000	0
43	WWQPYVLSV	276	-0.6000	0

ALLELE: DRB1_0408	Threshold for 3 % with score: 1.2	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.3000	48.86
2	VRRLTATAH	367	3.3800	38.41
3	VINVSTITC	196	3.0800	35.00
4	IVGAGNLDA	384	2.9000	32.95
5	VAIIDTGVQ	90	2.8000	31.82
6	VLSVASLTS	281	2.7000	30.68
7	MLNLPAAWQ	73	2.0000	22.73
8	YVLSVASLT	280	1.7000	19.32
9	VASLTSAGQ	284	1.7000	19.32
10	VALSGTSYA	335	1.7000	19.32
11	LVGLTAATV	441	1.6000	18.18

12	WAGVTSVSI	265	1.3000	14.77
13	VVRRLTATA	366	1.3000	14.77
14	IRAAFACLA	1	1.2000	13.64
15	LVAIIDTGV	89	0.8000	9.09
16	LLSIRAMST	151	0.8000	9.09
17	FACLAATVV	5	0.7000	7.95
18	VAAAGNTGA	232	0.7000	7.95
19	WVGIAAPGE	302	0.7000	7.95
20	IVHAADLGA	186	0.5000	5.68
21	WQPYVLSVA	277	0.5000	5.68
22	YPGLNATEV	358	0.4000	4.55
23	LVAGIVAGQ	128	0.1000	1.14
24	VSTITCLPA	199	0.1000	1.14
25	MVDQAALGA	210	0.1000	1.14
26	VAGWWTPPA	14	0.0500	0.57
27	LTAATVAIA	444	-0.1000	0
28	IASVSNSGD	312	-0.2000	0
29	FAGAAALSV	432	-0.2000	0
30	LAGAIVHAA	182	-0.3000	0
31	WQFSRGEQ	80	-0.4000	0
32	FSGVAPAAR	142	-0.6000	0
33	LGAKVINVS	192	-0.7000	0
34	IVAAAGNTG	231	-0.7000	0
35	YVSGVAALV	346	-0.8000	0
36	WWQPYVLSV	276	-0.9000	0
37	LSVLVGLTA	438	-1.0000	0
38	INVSTITCL	197	-1.1000	0
39	VAFAGAAAL	430	-1.2000	0
40	VLVGLTAAT	440	-1.2000	0
41	MIRAAFACL	0	-1.3000	0
42	VAPMEQRGA	44	-1.3000	0

ALLELE: DRB1_0410 Threshold for 3 % with score: Highest Score achievable by any peptide:

2.6

9.4

Rank	Sequence	At Position	Score	% of Highest Score
1	VRRLTATAH	367	5.6000	59.57
2	IRAMSTKFS	154	5.3000	56.38
3	VAIIDTGVQ	90	4.6000	48.94
4	VINVSTITC	196	4.0800	43.40
5	IVGAGNLDA	384	3.9000	41.49
6	MLNLPAAWQ	73	3.8000	40.43
7	IRYAAVDKD	220	3.7000	39.36
8	VLSVASLTS	281	3.7000	39.36
9	VASLTSAGQ	284	3.5000	37.23
10	IASVSNSGD	312	3.5000	37.23
11	LVGLTAATV	441	2.9000	30.85
12	LLSIRAMST	151	2.7000	28.72
13	WVGIAAPGE	302	2.7000	28.72
14	VALSGTSYA	335	2.7000	28.72
15	VVRRLTATA	366	2.3000	24.47
16	IRAAFACLA	1	2.2000	23.40
17	LVAIIDTGV	89	2.1000	22.34
18	LVALSGTSY	334	2.1000	22.34
19	LVAGIVAGQ	128	1.9000	20.21
20	VAAAGNTGA	232	1.7000	18.09
21	IVAAAGNTG	231	1.6000	17.02
22	YVLSVASLT	280	1.6000	17.02
23	IVHAADLGA	186	1.5000	15.96
24	VGIAAPGEN	303	1.4000	14.89
25	VSTITCLPA	199	1.1000	11.70
26	MVDQAALGA	210	1.1000	11.70
27	VAGWWTPPA	14	1.0500	11.17
28	VGLTAATVA	442	1.0000	10.64
29	INVSTITCL	197	0.9000	9.57
30	LTAATVAIA	444	0.9000	9.57
31	VAFAGAAAL	430	0.8000	8.51
32	MIRAAFACL	0	0.7000	7.45

33	LAGAIVHAA	182	0.7000	7.45
34	VLVGLTAAT	440	0.7000	7.45
35	ITCLPADRM	202	0.5000	5.32
36	WAGVTSVSI	265	0.5000	5.32
37	LPNVDAGGD	103	0.3000	3.19
38	LGAKVINVS	192	0.3000	3.19
39	LAATVVVAG	8	0.2000	2.13
40	VSGVIPGTD	55	0.2000	2.13
41	VIVAAAGNT	230	0.1000	1.06
42	IIDTGVQPG	92	-0.1000	0

ALLELE: DRB1_0421	Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.8000	53.33
2	IVGAGNLDA	384	3.3000	36.67
3	YVLSVASLT	280	3.2000	35.56
4	VALSGTSYA	335	2.5000	27.78
5	LVGLTAATV	441	2.4000	26.67
6	VLSVASLTS	281	2.1000	23.33
7	WVGIAAPGE	302	2.1000	23.33
8	VRRLTATAH	367	2.1000	23.33
9	IRYAAVDKD	220	2.0000	22.22
10	LNATEVVRR	361	1.9800	22.00
11	VVRRLTATA	366	1.8000	20.00
12	VAIIDTGVQ	90	1.7000	18.89
13	VINVSTITC	196	1.6800	18.67
14	WQFSRGEGQ	80	1.3000	14.44
15	LLSIRAMST	151	1.3000	14.44
16	MVDQAALGA	210	1.3000	14.44
17	IRAAFACLA	1	1.2000	13.33
18	FAGAAALSV	432	1.2000	13.33
19	MLNLPAAWQ	73	1.1000	12.22

20	VGLTAATVA	442	1.1000	12.22
21	LAATVVVAG	8	1.0800	12.00
22	FACLAATVV	5	1.0000	11.11
23	LVAIIDTGV	89	1.0000	11.11
24	YVSGVAALV	346	1.0000	11.11
25	WAGVTSVSI	265	0.9800	10.89
26	IVHAADLGA	186	0.9000	10.00
27	INVSTITCL	197	0.8600	9.56
28	IIDTGVQPG	92	0.8000	8.89
29	VASLTSAGQ	284	0.8000	8.89
30	YPGLNATEV	358	0.7000	7.78
31	ITCLPADRM	202	0.6000	6.67
32	IVAAAGNTG	231	0.6000	6.67
33	LVALSGTSY	334	0.6000	6.67
34	LVRSRYPGL	353	0.3600	4.00
35	VLVGLTAAT	440	0.3000	3.33
36	LVAGIVAGQ	128	0.2000	2.22
37	VSTITCLPA	199	0.2000	2.22
38	VAAAGNTGA	232	0.2000	2.22
39	WWQPYVLSV	276	0.2000	2.22
40	LAGAIVHAA	182	0.1000	1.11
41	VDKDAVIVA	225	0.0800	0.89
42	LTAATVAIA	444	-0.1000	0
43	VAFAGAAAL	430	-0.2400	0
44	MIRAAFACL	0	-0.3400	0
45	VVDAAAQPP	29	-0.5000	0

ALLELE: DRB1_0423	Threshold for 3 % with score: 1.68	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	5.3000	60.23
2	VRRLTATAH	367	4.3800	49.77
3	VINVSTITC	196	4.0800	46.36

4	IVGAGNLDA	384	3.9000	44.32
5	VAIIDTGVQ	90	3.8000	43.18
6	VLSVASLTS	281	3.7000	42.05
7	MLNLPAAWQ	73	3.0000	34.09
8	VASLTSAGQ	284	2.7000	30.68
9	VALSGTSYA	335	2.7000	30.68
10	LVGLTAATV	441	2.6000	29.55
11	VVRRLTATA	366	2.3000	26.14
12	IRAAFACLA	1	2.2000	25.00
13	LVAIIDTGV	89	1.8000	20.45
14	LLSIRAMST	151	1.8000	20.45
15	VAAAGNTGA	232	1.7000	19.32
16	IVHAADLGA	186	1.5000	17.05
17	LVAGIVAGQ	128	1.1000	12.50
18	VSTITCLPA	199	1.1000	12.50
19	MVDQAALGA	210	1.1000	12.50
20	VAGWWTPPA	14	1.0500	11.93
21	IRYAAVDKD	220	1.0000	11.36
22	LVALSGTSY	334	1.0000	11.36
23	VGLTAATVA	442	1.0000	11.36
24	LTAATVAIA	444	0.9000	10.23
25	IASVSNSGD	312	0.8000	9.09
26	LAGAIVHAA	182	0.7000	7.95
27	YVLSVASLT	280	0.7000	7.95
28	LGAKVINVS	192	0.3000	3.41
29	IVAAAGNTG	231	0.3000	3.41
30	WAGVTSVSI	265	0.3000	3.41
31	INVSTITCL	197	-0.1000	0
32	VAFAGAAAL	430	-0.2000	0
33	VLVGLTAAT	440	-0.2000	0
34	MIRAAFACL	0	-0.3000	0
35	FACLAATVV	5	-0.3000	0
36	VAPMEQRGA	44	-0.3000	0
37	WVGIAAPGE	302	-0.3000	0

38	VSGVAALVR	347	-0.3000	0
39	LNATEVVRR	361	-0.3000	0
40	VVVAGWWTP	12	-0.4000	0
41	WQPYVLSVA	277	-0.5000	0
42	LSVASL TSA	282	-0.5000	0
43	ITCLPADRM	202	-0.6000	0
44	VGIAAPGEN	303	-0.6000	0

ALLELE: DRB1_0426	Threshold for 3 % with score: 1.6	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.4000	51.16
2	IVGAGNLDA	384	3.3000	38.37
3	VRRLTATAH	367	2.6800	31.16
4	YVLSVASLT	280	2.5000	29.07
5	VALSGTSYA	335	2.5000	29.07
6	VAIIDTGVQ	90	2.4000	27.91
7	WQFSRGEQ	80	2.0000	23.26
8	MLNLPAAWQ	73	1.8000	20.93
9	VVRRLTATA	366	1.8000	20.93
10	VLSVASLTS	281	1.7000	19.77
11	VINVSTITC	196	1.6800	19.53
12	VASLTSAGQ	284	1.5000	17.44
13	LVGLTAATV	441	1.4000	16.28
14	MVDQAALGA	210	1.3000	15.12
15	IRAAFACLA	1	1.2000	13.95
16	VGLTAATVA	442	1.1000	12.79
17	LVAGIVAGQ	128	0.9000	10.47
18	IVHAADLGA	186	0.9000	10.47
19	IRYAAVDKD	220	0.9000	10.47
20	WVGIAAPGE	302	0.7000	8.14
21	LLSIRAMST	151	0.6000	6.98
22	LNATEVVRR	361	0.4800	5.58

23	VSTITCLPA	199	0.2000	2.33
24	VAAAGNTGA	232	0.2000	2.33
25	FAGAAALSV	432	0.2000	2.33
26	LAGAIVHAA	182	0.1000	1.16
27	VDKDAVIVA	225	0.0800	0.93
28	WAGVTSVSI	265	0.0800	0.93
29	INVSTITCL	197	-0.1000	0
30	LTAATVAIA	444	-0.1000	0
31	YPGLNATEV	358	-0.3000	0
32	LAATVVVAG	8	-0.3200	0
33	VLVGLTAAT	440	-0.4000	0
34	IIDTGVQPG	92	-0.6000	0
35	LVRSRYPGL	353	-0.6000	0
36	LPADRMVDQ	205	-0.6200	0
37	LVALSGTSY	334	-0.7000	0
38	VAGWWTPPA	14	-0.8000	0
39	IVAAAGNTG	231	-0.8000	0
40	WWQPYVLSV	276	-0.8000	0
41	LSVLVGLTA	438	-0.8000	0
42	ITCLPADRM	202	-0.9000	0

ALLELE: DRB1_0701	Threshold for 3 % with score: 4.1	Highest Score achievable by any peptide: 11.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	WAGVTSVSI	265	6.7000	57.76
2	INVSTITCL	197	5.6000	48.28
3	LVRSRYPGL	353	5.5000	47.41
4	YVLSVASLT	280	5.4000	46.55
5	FAGAAALSV	432	4.4000	37.93
6	VINVSTITC	196	3.8200	32.93
7	VLSVASLTS	281	3.6000	31.03
8	WWTPPAWAI	17	3.5000	30.17
9	LLSIRAMST	151	3.5000	30.17

10	MIRAAFACL	0	3.4000	29.31
11	YVSGVAALV	346	3.2000	27.59
12	VAFAGAAAL	430	3.2000	27.59
13	LNLPAAWQF	74	3.1000	26.72
14	WWQPYVLSV	276	3.0000	25.86
15	WQFSRGEGQ	80	2.9000	25.00
16	WVGIAAPGE	302	2.9000	25.00
17	IVGAGNLDA	384	2.9000	25.00
18	VGLTAATVA	442	2.8000	24.14
19	LVAIIDTGV	89	2.6000	22.41
20	LVGLTAATV	441	2.5000	21.55
21	FACLAATVV	5	2.1000	18.10
22	LNATEVVRR	361	2.1000	18.10
23	VSTITCLPA	199	2.0000	17.24
24	VALSGTSYA	335	1.8200	15.69
25	FSRGEGQLV	82	1.8000	15.52
26	YPGLNATEV	358	1.8000	15.52
27	VRRLTATAH	367	1.8000	15.52
28	LVALSGTSY	334	1.7000	14.66
29	VSNSGDGAL	315	1.6000	13.79
30	LDAVAALTW	390	1.6000	13.79
31	LAATVVVAG	8	1.5000	12.93
32	VVVAGWWTP	12	1.5000	12.93
33	YAAGYVSGV	342	1.4000	12.07
34	IVAAAGNTG	231	1.3000	11.21
35	IRAAFACLA	1	1.2000	10.34
36	VSGVAALVR	347	1.2000	10.34
37	VESTDGLTD	113	1.1000	9.48
38	IVHAADLGA	186	1.0000	8.62
39	VIVAAAGNT	230	1.0000	8.62
40	IRAMSTKFS	154	0.9200	7.93
41	IIDTGVQPG	92	0.8000	6.90
42	VAIIDTGVQ	90	0.6200	5.34
43	VVRRLTATA	366	0.6200	5.34

44	VPTPSQTML	66	0.5000	4.31
45	MVDQAALGA	210	0.5000	4.31
46	YAAVDKDAV	222	0.5000	4.31

ALLELE: DRB1_0703	Threshold for 3 % with score: 4.0	Highest Score achievable by any peptide: 11.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	WAGVTSVSI	265	6.7000	57.76
2	INVSTITCL	197	5.6000	48.28
3	LVRSRYPGL	353	5.5000	47.41
4	YVLSVASLT	280	5.4000	46.55
5	FAGAAALSV	432	4.4000	37.93
6	VINVSTITC	196	3.8200	32.93
7	VLSVASLTS	281	3.6000	31.03
8	WWTPPAWAI	17	3.5000	30.17
9	LLSIRAMST	151	3.5000	30.17
10	MIRAAFACL	0	3.4000	29.31
11	YVSGVAALV	346	3.2000	27.59
12	VAFAGAAAL	430	3.2000	27.59
13	LNLPAAWQF	74	3.1000	26.72
14	WWQPYVLSV	276	3.0000	25.86
15	WQFSRGEGQ	80	2.9000	25.00
16	WVGIAAPGE	302	2.9000	25.00
17	IVGAGNLDA	384	2.9000	25.00
18	VGLTAATVA	442	2.8000	24.14
19	LVAIIDTGV	89	2.6000	22.41
20	LVGLTAATV	441	2.5000	21.55
21	FACLAATVV	5	2.1000	18.10
22	LNATEVVRR	361	2.1000	18.10
23	VSTITCLPA	199	2.0000	17.24
24	VALSGTSYA	335	1.8200	15.69
25	FSRGEGQLV	82	1.8000	15.52
26	YPGLNATEV	358	1.8000	15.52

27	VRRLTATAH	367	1.8000	15.52
28	LVALSGTSY	334	1.7000	14.66
29	VSNSGDGAL	315	1.6000	13.79
30	LDAVAALTW	390	1.6000	13.79
31	LAATVVVAG	8	1.5000	12.93
32	VVVAGWWTP	12	1.5000	12.93
33	YAAGYVSGV	342	1.4000	12.07
34	IVAAAGNTG	231	1.3000	11.21
35	IRAAFACLA	1	1.2000	10.34
36	VSGVAALVR	347	1.2000	10.34
37	VESTDGLTD	113	1.1000	9.48
38	IVHAADLGA	186	1.0000	8.62
39	VIVAAAGNT	230	1.0000	8.62
40	IRAMSTKFS	154	0.9200	7.93
41	IIDTGVQPG	92	0.8000	6.90
42	VAIIDTGVQ	90	0.6200	5.34
43	VVRRLTATA	366	0.6200	5.34
44	VPTPSQTML	66	0.5000	4.31
45	MVDQAALGA	210	0.5000	4.31
46	YAAVDKDAV	222	0.5000	4.31

ALLELE: DRB1_0801	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	4.9000	56.98
2	VRSRYPGLN	354	4.3000	50.00
3	IRAMSTKFS	154	3.3000	38.37
4	FSPRTSGGD	161	2.7000	31.40
5	WVGIAAPGE	302	2.7000	31.40
6	LVAGIVAGQ	128	2.6000	30.23
7	WQPYVLSVA	277	2.6000	30.23
8	MLNLPAAWQ	73	2.5000	29.07
9	VAIIDTGVQ	90	2.4000	27.91

10	VAIARRRE	449	2.2000	25.58
11	LGAKVINVS	192	1.9000	22.09
12	IRYAAVDKD	220	1.8000	20.93
13	VGIAAPGEN	303	1.6000	18.60
14	LVGLTAATV	441	1.6000	18.60
15	VRRLTATAH	367	1.5000	17.44
16	IRAAFACLA	1	1.2000	13.95
17	IVAGQPGND	132	1.1000	12.79
18	VASLTSAGQ	284	1.1000	12.79
19	MEQRGACSV	47	1.0000	11.63
20	WAIGPPVVD	23	0.9000	10.47
21	VINVSTITC	196	0.9000	10.47
22	YVSGVAALV	346	0.9000	10.47
23	VQPGPRLPN	97	0.8000	9.30
24	VLSVASLTS	281	0.8000	9.30
25	VAPAARLLS	145	0.7000	8.14
26	YVLSVASLT	280	0.5000	5.81
27	IVGAGNLDA	384	0.4000	4.65
28	IARRRREPT	451	0.3000	3.49
29	VSGVIPGTD	55	0.2000	2.33
30	LTAATVAIA	444	0.2000	2.33
31	LLSIRAMST	151	-0.1000	0
32	VAPMEQRGA	44	-0.2000	0
33	LPNVDAGGD	103	-0.2000	0
34	VIVAAAGNT	230	-0.2000	0
35	VAFAGAAAL	430	-0.2000	0
36	FSGVAPAAR	142	-0.3000	0
37	FSMPGPWVG	296	-0.3000	0
38	LAGAIVHAA	182	-0.5000	0
39	VAALVRSRY	350	-0.5000	0
40	FAGAAALSV	432	-0.5000	0
41	MIRAAFACL	0	-0.6000	0
42	MSTKFSVRT	157	-0.6000	0
43	LGAAIRYAA	216	-0.6000	0

44	IVAAAGNTG	231	-0.6000	0
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ALLELE: DRB1_0802	Threshold for 3 % with score: 1.0	Highest Score achievable by any peptide: 8
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	4.9000	61.25
2	IRAMSTKFS	154	3.3000	41.25
3	WQPYVLSVA	277	2.6000	32.50
4	VRSRYPGLN	354	2.3000	28.75
5	LGAKVINVS	192	1.9000	23.75
6	LVAGIVAGQ	128	1.8000	22.50
7	MLNLPAAWQ	73	1.7000	21.25
8	VAIIDTGVQ	90	1.6000	20.00
9	LVGLTAATV	441	1.3000	16.25
10	IRAAFACLA	1	1.2000	15.00
11	VINVSTITC	196	0.9000	11.25
12	VLSVASLTS	281	0.8000	10.00
13	MEQRGACSV	47	0.7000	8.75
14	VAPAARLLS	145	0.7000	8.75
15	YVSGVAALV	346	0.6000	7.50
16	IVGAGNLDA	384	0.4000	5.00
17	VASLTSAGQ	284	0.3000	3.75
18	VRRLTATAH	367	0.2800	3.50
19	LTAATVAIA	444	0.2000	2.50
20	VAPMEQRGA	44	-0.2000	0
21	FSGVAPAAR	142	-0.3000	0
22	WVGIAAPGE	302	-0.3000	0
23	YVLSVASLT	280	-0.4000	0
24	VGIAAPGEN	303	-0.4000	0
25	LAGAIVHAA	182	-0.5000	0
26	LGAAIRYAA	216	-0.6000	0
27	IARRRREPT	451	-0.6000	0
28	VHAADLGAK	187	-0.8000	0

29	FAGAAALSV	432	-0.8000	0
30	VAIARRRRE	449	-0.8000	0
31	IRYAAVDKD	220	-0.9000	0
32	WWQPYVLSV	276	-0.9000	0
33	VLVGLTAAT	440	-0.9000	0
34	LLSIRAMST	151	-1.0000	0
35	WAGVTSVSI	265	-1.0000	0
36	VIVAAAGNT	230	-1.1000	0
37	LSVLVGLTA	438	-1.1000	0
38	VAGWWTPPA	14	-1.2000	0
39	VQPGPRLPN	97	-1.2000	0
40	VAVLAGAIV	179	-1.2000	0
41	VAFAGAAAL	430	-1.2000	0
42	VSTITCLPA	199	-1.3000	0
43	VLAGAIVHA	181	-1.4000	0

ALLELE: DRB1_0804	Threshold for 3 % with score: 1.6	Highest Score achievable by any peptide: 8
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	5.9000	73.75
2	IRAMSTKFS	154	4.3000	53.75
3	VRSRYPGLN	354	3.3000	41.25
4	LGAKVINVS	192	2.9000	36.25
5	LVAGIVAGQ	128	2.8000	35.00
6	MLNLPAAWQ	73	2.7000	33.75
7	VAIIDTGVQ	90	2.6000	32.50
8	LVGLTAATV	441	2.3000	28.75
9	IRAAFACLA	1	2.2000	27.50
10	VINVSTITC	196	1.9000	23.75
11	VLSVASLTS	281	1.8000	22.50
12	MEQRGACSV	47	1.7000	21.25
13	VAPAARLLS	145	1.7000	21.25
14	WQPYVLSVA	277	1.6000	20.00

15	IVGAGNLDA	384	1.4000	17.50
16	VASLTSAGQ	284	1.3000	16.25
17	VRRLTATAH	367	1.2800	16.00
18	LTAATVAIA	444	1.2000	15.00
19	LSIRAMSTK	152	1.0000	12.50
20	VAPMEQRGA	44	0.8000	10.00
21	VGIAAPGEN	303	0.6000	7.50
22	LAGAIVHAA	182	0.5000	6.25
23	LGAAIRYAA	216	0.4000	5.00
24	IARRRREPT	451	0.4000	5.00
25	VHAADLGAK	187	0.2000	2.50
26	VAIARRRRE	449	0.2000	2.50
27	IRYAAVDKD	220	0.1000	1.25
28	VLVGLTAAT	440	0.1000	1.25
29	VIVAAAGNT	230	-0.1000	0
30	LSVLVGLTA	438	-0.1000	0
31	VAGWWTPPA	14	-0.2000	0
32	VQPGPRLPN	97	-0.2000	0
33	VAVLAGAIV	179	-0.2000	0
34	VAFAGAAAL	430	-0.2000	0
35	VSTITCLPA	199	-0.3000	0
36	VLAGAIVHA	181	-0.4000	0
37	IVHAADLGA	186	-0.4000	0
38	YVSGVAALV	346	-0.4000	0
39	MSTKFSVRT	157	-0.5000	0
40	MVDQAALGA	210	-0.5000	0
41	VALSGTSYA	335	-0.5000	0
42	MIRAAFACL	0	-0.6000	0
43	IVAGQPGND	132	-0.6000	0
44	LDVAVLAGA	177	-0.6000	0

ALLELE: DRB1_0806	Threshold for 3 % with score: 2.4	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	5.9000	68.60
2	VRSRYPGLN	354	5.3000	61.63
3	IRAMSTKFS	154	4.3000	50.00
4	LVAGIVAGQ	128	3.6000	41.86
5	MLNLPAAWQ	73	3.5000	40.70
6	VAIIDTGVQ	90	3.4000	39.53
7	VAIARRRRE	449	3.2000	37.21
8	LGAKVINVS	192	2.9000	33.72
9	IRYAAVDKD	220	2.8000	32.56
10	VGIAAPGEN	303	2.6000	30.23
11	LVGLTAATV	441	2.6000	30.23
12	VRRLTATAH	367	2.5000	29.07
13	IRAAFACLA	1	2.2000	25.58
14	IVAGQPGND	132	2.1000	24.42
15	VASLTSAGQ	284	2.1000	24.42
16	MEQRGACSV	47	2.0000	23.26
17	VINVSTITC	196	1.9000	22.09
18	VQPGPRLPN	97	1.8000	20.93
19	VLSVASLTS	281	1.8000	20.93
20	VAPAARLLS	145	1.7000	19.77
21	FSPRTSGGD	161	1.7000	19.77
22	WVGIAAPGE	302	1.7000	19.77
23	WQPYVLSVA	277	1.6000	18.60
24	IVGAGNLDA	384	1.4000	16.28
25	IARRRREPT	451	1.3000	15.12
26	VSGVIPGTD	55	1.2000	13.95
27	LTAATVAIA	444	1.2000	13.95
28	VLVGLTAAT	440	1.0000	11.63
29	LLSIRAMST	151	0.9000	10.47
30	VAPMEQRGA	44	0.8000	9.30
31	LPNVDAGGD	103	0.8000	9.30
32	VIVAAAGNT	230	0.8000	9.30
33	VAFAGAAAL	430	0.8000	9.30

34	LAGAIVHAA	182	0.5000	5.81
35	VAALVRSRY	350	0.5000	5.81
36	MIRAAFACL	0	0.4000	4.65
37	MSTKFSPT	157	0.4000	4.65
38	LGAAIRYAA	216	0.4000	4.65
39	IVAAAGNTG	231	0.4000	4.65
40	LSIRAMSTK	152	0.3000	3.49
41	LTDLSRPDD	253	0.2000	2.33
42	VAVLAGAIV	179	0.1000	1.16
43	WAIGPPVVD	23	-0.1000	0
44	VTSVSIPSW	268	-0.1000	0
45	YVSGVAALV	346	-0.1000	0

ALLELE: DRB1_0813	Threshold for 3 % with score: 1.9	Highest Score achievable by any peptide: 8.7
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Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	4.9000	56.32
2	WQPYVLSVA	277	4.4000	50.57
3	LGAKVINVS	192	3.9000	44.83
4	VRRLTATAH	367	3.0800	35.40
5	IRAMSTKFS	154	2.8000	32.18
6	LVAGIVAGQ	128	1.8000	20.69
7	LSIRAMSTK	152	1.8000	20.69
8	VINVSTITC	196	1.7800	20.46
9	MLNLPAAWQ	73	1.7000	19.54
10	VRSRYPGLN	354	1.6000	18.39
11	YVLSVASLT	280	1.4000	16.09
12	VLSVASLTS	281	1.4000	16.09
13	VAPAARLLS	145	1.3000	14.94
14	LVGLTAATV	441	1.3000	14.94
15	IRAAFACLA	1	1.2000	13.79
16	IARRRREPT	451	1.1000	12.64
17	IVGAGNLDA	384	1.0000	11.49

18	VAIIDTGVQ	90	0.9000	10.34
19	MEQRGACSV	47	0.7000	8.05
20	YVSGVAALV	346	0.6000	6.90
21	LVALSGTSY	334	0.5000	5.75
22	FACLAATVV	5	0.4000	4.60
23	LGAAIRYAA	216	0.3000	3.45
24	IRYAAVDKD	220	0.3000	3.45
25	VASLTSAGQ	284	0.3000	3.45
26	VALSGTSYA	335	0.3000	3.45
27	VAALVRSRY	350	0.2000	2.30
28	LTAATVAIA	444	0.2000	2.30
29	WQFSRGEQ	80	0.1000	1.15
30	IVAAAGNTG	231	0.1000	1.15
31	YPGLNATEV	358	0.1000	1.15
32	WVGIAAPGE	302	-0.1000	0
33	VGLTAATVA	442	-0.1000	0
34	LSVASL TSA	282	-0.2000	0
35	FAGAAALSV	432	-0.2000	0
36	FSGVAPAAR	142	-0.3000	0
37	YAAVDKDAV	222	-0.3000	0
38	WWQPYVLSV	276	-0.3000	0
39	VLAGAIVHA	181	-0.4000	0
40	VAPMEQRGA	44	-0.5000	0
41	LSVLVGLTA	438	-0.5000	0

ALLELE: DRB1_0817		Threshold for 3 % with score: 2.8	Highest Score achievable by any peptide: 10.1	
Rank	Sequence	At Position	Score	% of Highest Score
1	VVRRLTATA	366	4.9000	48.51
2	VRSRYPGLN	354	4.4000	43.56
3	IRAMSTKFS	154	3.9000	38.61
4	WVGIAAPGE	302	3.8500	38.12
5	FSPRTSGGD	161	2.8000	27.72

6	VQPGPRLPN	97	2.6000	25.74
7	LVAGIVAGQ	128	2.6000	25.74
8	WQPYVLSVA	277	2.6000	25.74
9	VLSVASLTS	281	2.6000	25.74
10	VRRLTATAH	367	2.6000	25.74
11	MLNLPAAWQ	73	2.5000	24.75
12	VAIIDTGVQ	90	2.5000	24.75
13	VAPAARLLS	145	2.5000	24.75
14	VINVSTITC	196	2.5000	24.75
15	VAIARRRRE	449	2.4000	23.76
16	LGAKVINVS	192	2.2000	21.78
17	IVGAGNLDA	384	2.2000	21.78
18	VGIAAPGEN	303	1.7000	16.83
19	LVGLTAATV	441	1.6000	15.84
20	LLSIRAMST	151	1.5000	14.85
21	IRYAAVDKD	220	1.5000	14.85
22	WAIGPPVVD	23	1.4000	13.86
23	IARRRREPT	451	1.4000	13.86
24	FAGAAALSV	432	1.3000	12.87
25	IRAAFACLA	1	1.2000	11.88
26	IVAGQPGND	132	1.2000	11.88
27	WWQPYVLSV	276	1.2000	11.88
28	VASLTSAGQ	284	1.1000	10.89
29	MEQRGACSV	47	1.0000	9.90
30	YVSGVAALV	346	0.9000	8.91
31	LSVLVGLTA	438	0.7000	6.93
32	MSTKFSVRT	157	0.5500	5.45
33	VSTITCLPA	199	0.5000	4.95
34	YVLSVASLT	280	0.5000	4.95
35	FSMPGPWVG	296	0.5000	4.95
36	IVHAADLGA	186	0.4000	3.96
37	LTDLSRPDD	253	0.3500	3.47
38	VSGVIPGTD	55	0.3000	2.97
39	WQFSRGEGQ	80	0.3000	2.97

40	MVDQAALGA	210	0.3000	2.97
41	LAGAIVHAA	182	0.2000	1.98
42	LTAATVAIA	444	0.2000	1.98
43	VESTDGLTD	113	0.1000	0.99
44	LGAAIRYAA	216	0.1000	0.99
45	VTSVSIPSW	268	0.0500	0.50
46	WQLPAEPGG	398	0.0500	0.50

ALLELE: DRB1_1101 Threshold for 3 % with score: 1.1 Highest Score achievable by any peptide: 8.3

Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.5000	42.17
2	VLSVASLTS	281	2.7000	32.53
3	VINVSTITC	196	2.6000	31.33
4	VAPAARLLS	145	2.5000	30.12
5	VAIIDTGVQ	90	2.3000	27.71
6	IVGAGNLDA	384	2.2000	26.51
7	MLNLPAAWQ	73	2.1000	25.30
8	VVRRLTATA	366	1.9000	22.89
9	VRRLTATAH	367	1.7800	21.45
10	LVGLTAATV	441	1.7000	20.48
11	WVGIAAPGE	302	1.4500	17.47
12	IRAAFACLA	1	1.2000	14.46
13	LLSIRAMST	151	1.2000	14.46
14	LVAGIVAGQ	128	1.1000	13.25
15	VSTITCLPA	199	1.1000	13.25
16	LSVLVGLTA	438	1.1000	13.25
17	FAGAAALSV	432	1.0000	12.05
18	MVDQAALGA	210	0.9000	10.84
19	VASLTSAGQ	284	0.7000	8.43
20	IVHAADLGA	186	0.4000	4.82
21	LAGAIVHAA	182	0.2000	2.41
22	WWQPYVLSV	276	0.2000	2.41

23	LTAATVAIA	444	0.2000	2.41
24	LGAAIRYAA	216	0.1000	1.20
25	VQPGPRLPN	97	-0.1000	0
26	YVLSVASLT	280	-0.1000	0
27	YVSGVAALV	346	-0.1000	0
28	VAGWWTPPA	14	-0.1500	0
29	WQFSRGEQ	80	-0.2000	0
30	FSGVAPAAR	142	-0.2000	0
31	VSGVAALVR	347	-0.2000	0
32	WQPYVLSVA	277	-0.3000	0
33	VGIAAPGEN	303	-0.3000	0
34	VAPMEQRGA	44	-0.4000	0
35	WAGVTSVSI	265	-0.4000	0
36	LGAKVINVS	192	-0.6000	0
37	VRSRYPGLN	354	-0.6000	0
38	VAIARRRRE	449	-0.6000	0
39	VHAADLGAK	187	-0.7000	0
40	VTSVSIPSW	268	-0.7500	0
41	VAVLAGAIV	179	-0.8000	0
42	LVALSGTSY	334	-0.8000	0
43	FACLAATVV	5	-0.9000	0
44	VIVAAAGNT	230	-1.0000	0
45	IRYAAVDKD	220	-1.2000	0

ALLELE: DRB1_1102	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	53.57
2	VVRRLTATA	366	3.8000	45.24
3	LGAKVINVS	192	2.8000	33.33
4	VRRLTATAH	367	2.4800	29.52
5	MLNLPAAWQ	73	2.4000	28.57
6	VAPARLLS	145	2.4000	28.57

7	LVAGIVAGQ	128	2.3000	27.38
8	IRAAFACLA	1	2.2000	26.19
9	IVGAGNLDA	384	2.1000	25.00
10	VAPMEQRGA	44	2.0000	23.81
11	LVGLTAATV	441	2.0000	23.81
12	VAIARRRRE	449	2.0000	23.81
13	MVDQAALGA	210	1.8000	21.43
14	LAGAIVHAA	182	1.7000	20.24
15	LGAAIRYAA	216	1.3000	15.48
16	VLSVASLTS	281	1.3000	15.48
17	VAGWWTPPA	14	1.2000	14.29
18	LTAATVAIA	444	1.2000	14.29
19	VINVSTITC	196	1.0000	11.90
20	IRYAAVDKD	220	1.0000	11.90
21	VASLTSAGQ	284	1.0000	11.90
22	VAIIDTGVQ	90	0.7000	8.33
23	IVAAAGNTG	231	0.5000	5.95
24	VVVAGWWTP	12	0.3000	3.57
25	IVHAADLGA	186	0.3000	3.57
26	VALSGTSYA	335	0.3000	3.57
27	LSVLVGLTA	438	0.3000	3.57
28	WQPYVLSVA	277	0.2000	2.38
29	VRSRYPGLN	354	0.2000	2.38
30	VLAGAIVHA	181	0.1000	1.19
31	LVALSGTSY	334	-0.1000	0
32	LNATEVVRR	361	-0.2000	0
33	LTWQLPAEP	396	-0.2000	0
34	VAFAGAAAL	430	-0.2000	0
35	LNLPAAWQF	74	-0.3000	0
36	IARRRREPT	451	-0.3000	0
37	MEQRGACSV	47	-0.4000	0
38	VGIAAPGEN	303	-0.4000	0
39	VLVGLTAAT	440	-0.4000	0
40	VAVLAGAIV	179	-0.5000	0

41	INVSTITCL	197	-0.5000	0
42	VSTITCLPA	199	-0.5000	0
43	LSVASLTSA	282	-0.5000	0

ALLELE: DRB1_1104	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 8.3
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	54.22
2	VLSVASLTS	281	3.7000	44.58
3	VINVSTITC	196	3.6000	43.37
4	VAPAARLLS	145	3.5000	42.17
5	VAIIDTGVQ	90	3.3000	39.76
6	IVGAGNLDA	384	3.2000	38.55
7	MLNLPAAWQ	73	3.1000	37.35
8	VVRRLTATA	366	2.9000	34.94
9	VRRLTATAH	367	2.7800	33.49
10	LVGLTAATV	441	2.7000	32.53
11	IRAAFACLA	1	2.2000	26.51
12	LLSIRAMST	151	2.2000	26.51
13	LVAGIVAGQ	128	2.1000	25.30
14	VSTITCLPA	199	2.1000	25.30
15	LSVLVGLTA	438	2.1000	25.30
16	MVDQAALGA	210	1.9000	22.89
17	VASLTSAGQ	284	1.7000	20.48
18	IVHAADLGA	186	1.4000	16.87
19	LAGAIVHAA	182	1.2000	14.46
20	LTAATVAIA	444	1.2000	14.46
21	LGAAIRYAA	216	1.1000	13.25
22	VQPGPRLPN	97	0.9000	10.84
23	VAGWWTPPA	14	0.8500	10.24
24	VSGVAALVR	347	0.8000	9.64
25	VGIAAPGEN	303	0.7000	8.43
26	VAPMEQRGA	44	0.6000	7.23

27	WVGIAAPGE	302	0.4500	5.42
28	LGAKVINVS	192	0.4000	4.82
29	VRSRYPGLN	354	0.4000	4.82
30	VAIARRRRE	449	0.4000	4.82
31	VHAADLGAK	187	0.3000	3.61
32	VTSVSIPSW	268	0.2500	3.01
33	VAVLAGAIV	179	0.2000	2.41
34	LVALSGTSY	334	0.2000	2.41
35	IRYAAVDKD	220	-0.2000	0
36	VALSGTSYA	335	-0.2000	0
37	VAALVRSRY	350	-0.2000	0
38	LNATEVVRR	361	-0.2000	0
39	VAFAGAAAL	430	-0.2000	0
40	LVRSRYPGL	353	-0.3500	0
41	LDAAVAALTW	390	-0.4000	0
42	VGLTAATVA	442	-0.4000	0
43	LTSAGQPSK	287	-0.4500	0

ALLELE: DRB1_1106	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 8.3		
Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	54.22
2	VLSVASLTS	281	3.7000	44.58
3	VINVSTITC	196	3.6000	43.37
4	VAPAARLLS	145	3.5000	42.17
5	VAIIDTGVQ	90	3.3000	39.76
6	IVGAGNLDA	384	3.2000	38.55
7	MLNLPAAWQ	73	3.1000	37.35
8	VVRRLTATA	366	2.9000	34.94
9	VRRLTATAH	367	2.7800	33.49
10	LVGLTAATV	441	2.7000	32.53
11	IRAAFACLA	1	2.2000	26.51
12	LLSIRAMST	151	2.2000	26.51

13	LVAGIVAGQ	128	2.1000	25.30
14	VSTITCLPA	199	2.1000	25.30
15	LSVLVGLTA	438	2.1000	25.30
16	MVDQAALGA	210	1.9000	22.89
17	VASLTSAGQ	284	1.7000	20.48
18	IVHAADLGA	186	1.4000	16.87
19	LAGAIVHAA	182	1.2000	14.46
20	LTAATVAIA	444	1.2000	14.46
21	LGAAIRYAA	216	1.1000	13.25
22	VQPGPRLPN	97	0.9000	10.84
23	VAGWWTPPA	14	0.8500	10.24
24	VSGVAALVR	347	0.8000	9.64
25	VGIAAPGEN	303	0.7000	8.43
26	VAPMEQRGA	44	0.6000	7.23
27	WVGIAAPGE	302	0.4500	5.42
28	LGAKVINVS	192	0.4000	4.82
29	VRSRYPGLN	354	0.4000	4.82
30	VAIARRRRE	449	0.4000	4.82
31	VHAADLGAK	187	0.3000	3.61
32	VTSVSIPSW	268	0.2500	3.01
33	VAVLAGAIV	179	0.2000	2.41
34	LVALSGTSY	334	0.2000	2.41
35	IRYAAVDKD	220	-0.2000	0
36	VALSGTSYA	335	-0.2000	0
37	VAALVRSRY	350	-0.2000	0
38	LNATEVVRR	361	-0.2000	0
39	VAFAGAAAL	430	-0.2000	0
40	LVRSRYPGL	353	-0.3500	0
41	LDAVAALTW	390	-0.4000	0
42	VGLTAATVA	442	-0.4000	0
43	LTSAGQPSK	287	-0.4500	0

ALLELE: DRB1_1107 Threshold for 3 % with score: Highest Score achievable by any peptide: 9.1

Rank	Sequence	At Position	Score	% of Highest Score
1	LVAGIVAGQ	128	4.3000	47.25
2	VAIIDTGVQ	90	3.4000	37.36
3	VRRLTATAH	367	2.8800	31.65
4	IRAMSTKFS	154	2.8000	30.77
5	VINVSTITC	196	2.8000	30.77
6	VDKDAVIVA	225	2.6000	28.57
7	VVRRLTATA	366	2.6000	28.57
8	VALSGTSYA	335	2.5700	28.24
9	VLGAIVHA	181	2.4000	26.37
10	IRAAFACLA	1	2.2000	24.18
11	VAPAARLLS	145	2.2000	24.18
12	MLNLPAAWQ	73	2.0000	21.98
13	VLSVASLTS	281	2.0000	21.98
14	IRYAAVDKD	220	1.9000	20.88
15	IVGAGNLDA	384	1.9000	20.88
16	VQPGPRLPN	97	1.8000	19.78
17	LVRSRYPGL	353	1.8000	19.78
18	YVLSVASLT	280	1.6700	18.35
19	LLSIRAMST	151	1.6000	17.58
20	INVSTITCL	197	1.6000	17.58
21	LPADRMVDQ	205	1.6000	17.58
22	VLVGLTAAT	440	1.6000	17.58
23	LVGLTAATV	441	1.6000	17.58
24	IVAGQPGND	132	1.5000	16.48
25	LGAAIRYAA	216	1.4500	15.93
26	WQFSRGEGQ	80	1.3000	14.29
27	VGIAAPGEN	303	1.2000	13.19
28	LTAATVAIA	444	1.2000	13.19
29	YVSGVAALV	346	1.1000	12.09
30	MVDQAALGA	210	1.0000	10.99
31	LANGLPDAH	323	0.9800	10.77
32	LGAKVINVS	192	0.8100	8.90

33	VHAADLGAK	187	0.8000	8.79
34	WVGIAAPGE	302	0.8000	8.79
35	VAGWWTPPA	14	0.7000	7.69
36	LAGAIVHAA	182	0.6000	6.59
37	VTSVSIPSW	268	0.6000	6.59
38	VASLTSAGQ	284	0.6000	6.59
39	VRSRYPLGN	354	0.6000	6.59
40	VIVAAAGNT	230	0.5000	5.49
41	IGPPVVDAA	25	0.4000	4.40
42	VSTITCLPA	199	0.4000	4.40
43	VGLTAATVA	442	0.4000	4.40
44	IVAAAGNTG	231	0.3100	3.41
45	LSVASL TSA	282	0.3000	3.30
46	LTSAGQPSK	287	0.3000	3.30

ALLELE: DRB1_1114	Threshold for 3 % with score: 1.3	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.5000	41.67
2	VVRRLTATA	366	2.8000	33.33
3	LGAKVINVS	192	1.8000	21.43
4	VRRLTATAH	367	1.4800	17.62
5	MLNLPAAWQ	73	1.4000	16.67
6	VAPAARLLS	145	1.4000	16.67
7	LVAGIVAGQ	128	1.3000	15.48
8	IRAAFACLA	1	1.2000	14.29
9	WQPYYLSVA	277	1.2000	14.29
10	IVGAGNLDA	384	1.1000	13.10
11	VAPMEQRGA	44	1.0000	11.90
12	LVGLTAATV	441	1.0000	11.90
13	VAIARRRRE	449	1.0000	11.90
14	MVDQAALGA	210	0.8000	9.52
15	LAGAIVHAA	182	0.7000	8.33

16	YVLSVASLT	280	0.4000	4.76
17	LGAAIRYAA	216	0.3000	3.57
18	VLSVASLTS	281	0.3000	3.57
19	VAGWWTPPA	14	0.2000	2.38
20	WQFSRGEGQ	80	0.2000	2.38
21	LTAATVAIA	444	0.2000	2.38
22	YVSGVAALV	346	0.1000	1.19
23	FAGAAALSV	432	-0.1000	0
24	VAIIDTGVQ	90	-0.3000	0
25	IVAAAGNTG	231	-0.5000	0
26	FSMPGPWVG	296	-0.5000	0
27	WVGIAAPGE	302	-0.5000	0
28	VVVAGWWTP	12	-0.7000	0
29	IVHAADLGA	186	-0.7000	0
30	WWQPYVLSV	276	-0.7000	0
31	VALSGTSYA	335	-0.7000	0
32	LSVLVGLTA	438	-0.7000	0
33	VRSRYPGLN	354	-0.8000	0
34	VLGAIVHA	181	-0.9000	0
35	VQPGPRLPN	97	-1.0000	0
36	LTATAHRGA	370	-1.0000	0
37	LVALSGTSY	334	-1.1000	0
38	FACLAATVV	5	-1.2000	0
39	WAGVTSVSI	265	-1.2000	0
40	LNATEVRRR	361	-1.2000	0
41	LTWQLPAEP	396	-1.2000	0
42	VAFAGAAAL	430	-1.2000	0

ALLELE: DRB1_1120	Threshold for 3 % with score: 2.1	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.9000	44.32
2	VVRRLTATA	366	2.8000	31.82

3	VAIARRRE	449	2.4000	27.27
4	LGAKVINVS	192	2.2000	25.00
5	LVGLTAATV	441	2.0000	22.73
6	VAPAARLLS	145	1.8000	20.45
7	IRAAFACLA	1	1.2000	13.64
8	WQPYVLSVA	277	1.2000	13.64
9	IRYAAVDKD	220	1.1000	12.50
10	YVLSVASLT	280	1.1000	12.50
11	YVSGVAALV	346	1.1000	12.50
12	IVGAGNLDA	384	1.1000	12.50
13	VAPMEQRGA	44	1.0000	11.36
14	IVAAAGNTG	231	0.9000	10.23
15	FSMPGPWVG	296	0.9000	10.23
16	WVGIAAPGE	302	0.9000	10.23
17	VRRLTATAH	367	0.9000	10.23
18	FAGAAALSV	432	0.9000	10.23
19	MVDQAALGA	210	0.8000	9.09
20	MLNLPAAWQ	73	0.7000	7.95
21	LAGAIVHAA	182	0.7000	7.95
22	VLSVASLTS	281	0.7000	7.95
23	LNLPAAWQF	74	0.6000	6.82
24	LVAGIVAGQ	128	0.6000	6.82
25	VVVAGWWTP	12	0.3000	3.41
26	LGAAIRYAA	216	0.3000	3.41
27	WWQPYVLSV	276	0.3000	3.41
28	LNATEVVRR	361	0.3000	3.41
29	VAGWWTPPA	14	0.2000	2.27
30	LVALSGTSY	334	0.2000	2.27
31	LTAATVAIA	444	0.2000	2.27
32	FACLAATVV	5	-0.2000	0
33	WAIGPPVVD	23	-0.2000	0
34	VQPGPRLPN	97	-0.2000	0
35	VAALVRSRY	350	-0.2000	0
36	LTWQLPAEP	396	-0.2000	0

37	VAFAGAAAL	430	-0.2400	0
38	WAGVTSVSI	265	-0.3000	0
39	MEQRGACSV	47	-0.4000	0
40	VAGQPGNDG	133	-0.4000	0
41	WQFSRGEGQ	80	-0.5000	0
42	VAVLAGAIV	179	-0.5000	0

ALLELE: DRB1_1121	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	53.57
2	VVRRLTATA	366	3.8000	45.24
3	LGAKVINVS	192	2.8000	33.33
4	VRRLTATAH	367	2.4800	29.52
5	MLNLPAAWQ	73	2.4000	28.57
6	VAPAARLLS	145	2.4000	28.57
7	LVAGIVAGQ	128	2.3000	27.38
8	IRAAFACLA	1	2.2000	26.19
9	IVGAGNLDA	384	2.1000	25.00
10	VAPMEQRGA	44	2.0000	23.81
11	LVGLTAATV	441	2.0000	23.81
12	VAIARRRRE	449	2.0000	23.81
13	MVDQAALGA	210	1.8000	21.43
14	LAGAIVHAA	182	1.7000	20.24
15	LGAAIRYAA	216	1.3000	15.48
16	VLSVASLTS	281	1.3000	15.48
17	VAGWWTPPA	14	1.2000	14.29
18	LTAATVAIA	444	1.2000	14.29
19	VINVSTITC	196	1.0000	11.90
20	IRYAAVDKD	220	1.0000	11.90
21	VASLTSAGQ	284	1.0000	11.90
22	VAIIDTGVQ	90	0.7000	8.33
23	IVAAAGNTG	231	0.5000	5.95

24	VVVAGWWTP	12	0.3000	3.57
25	IVHAADLGA	186	0.3000	3.57
26	VALSGTSYA	335	0.3000	3.57
27	LSVLVGLTA	438	0.3000	3.57
28	WQPYVLSVA	277	0.2000	2.38
29	VRSRYPLGN	354	0.2000	2.38
30	VLAGAIVHA	181	0.1000	1.19
31	LVALSGTSY	334	-0.1000	0
32	LNATEVRR	361	-0.2000	0
33	LTWQLPAEP	396	-0.2000	0
34	VAFAGAAAL	430	-0.2000	0
35	LNLPAAWQF	74	-0.3000	0
36	IARRRREPT	451	-0.3000	0
37	MEQRGACSV	47	-0.4000	0
38	VGIAAPGEN	303	-0.4000	0
39	VLVGLTAAT	440	-0.4000	0
40	VAVLAGAIV	179	-0.5000	0
41	INVSTITCL	197	-0.5000	0
42	VSTITCLPA	199	-0.5000	0
43	LSVASL TSA	282	-0.5000	0

ALLELE: DRB1_1128	Threshold for 3 % with score: 2.15	Highest Score achievable by any peptide: 8.7
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.9000	44.83
2	VLSVASLTS	281	3.1000	35.63
3	VAPAARLLS	145	2.9000	33.33
4	WVGIAAPGE	302	2.8500	32.76
5	LVGLTAATV	441	2.7000	31.03
6	VINVSTITC	196	2.6000	29.89
7	IVGAGNLDA	384	2.2000	25.29
8	FAGAAALSV	432	2.0000	22.99
9	LLSIRAMST	151	1.9000	21.84

10	VVRRLTATA	366	1.9000	21.84
11	VAIIDTGVQ	90	1.6000	18.39
12	MLNLPAAWQ	73	1.4000	16.09
13	FSGVAPAAR	142	1.3000	14.94
14	VSGVAALVR	347	1.3000	14.94
15	IRAAFACLA	1	1.2000	13.79
16	WWQPYVLSV	276	1.2000	13.79
17	VRRLTATAH	367	1.2000	13.79
18	VSTITCLPA	199	1.1000	12.64
19	LSVLVGLTA	438	1.1000	12.64
20	MVDQAALGA	210	0.9000	10.34
21	YVSGVAALV	346	0.9000	10.34
22	VAIARRRRE	449	0.8000	9.20
23	VQPGPRLPN	97	0.7000	8.05
24	YVLSVASLT	280	0.6000	6.90
25	WAGVTSVSI	265	0.5000	5.75
26	VGIAAPGEN	303	0.5000	5.75
27	LVALSGTSY	334	0.5000	5.75
28	LVAGIVAGQ	128	0.4000	4.60
29	IVHAADLGA	186	0.4000	4.60
30	LNATEVRR	361	0.3000	3.45
31	VAVLAGAIV	179	0.2000	2.30
32	LAGAIVHAA	182	0.2000	2.30
33	VRSRYPGLN	354	0.2000	2.30
34	LTAATVAIA	444	0.2000	2.30
35	FACLAATVV	5	0.1000	1.15
36	LGAAIRYAA	216	0.1000	1.15
37	VAALVRSRY	350	0.1000	1.15
38	IRYAAVDKD	220	-0.1000	0
39	FSMPGPWVG	296	-0.1000	0
40	VAGWWTPPA	14	-0.1500	0
41	LGAKVINVS	192	-0.2000	0
42	IVAAAGNTG	231	-0.2000	0
43	YPGLNATEV	358	-0.2000	0

44	VAFAGAAAL	430	-0.2400	0
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ALLELE: DRB1_1301	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.9000	55.68
2	VVRLTATA	366	3.8000	43.18
3	VAIARRRE	449	3.4000	38.64
4	LGAKVINVS	192	3.2000	36.36
5	LVGLTAATV	441	3.0000	34.09
6	VAPAARLLS	145	2.8000	31.82
7	IRAAFACLA	1	2.2000	25.00
8	IRYAAVDKD	220	2.1000	23.86
9	IVGAGNLDA	384	2.1000	23.86
10	VAPMEQRGA	44	2.0000	22.73
11	IVAAAGNTG	231	1.9000	21.59
12	VRRLTATAH	367	1.9000	21.59
13	MVDQAALGA	210	1.8000	20.45
14	MLNLPAAWQ	73	1.7000	19.32
15	LAGAIVHAA	182	1.7000	19.32
16	VLSVASLTS	281	1.7000	19.32
17	LNLPAAWQF	74	1.6000	18.18
18	LVAGIVAGQ	128	1.6000	18.18
19	VVVAGWWTP	12	1.3000	14.77
20	LGAAIRYAA	216	1.3000	14.77
21	LNATEVVRR	361	1.3000	14.77
22	VAGWWTPPA	14	1.2000	13.64
23	LVALSGTSY	334	1.2000	13.64
24	LTAATVAIA	444	1.2000	13.64
25	VINVSTITC	196	1.0000	11.36
26	VRSRYPGLN	354	1.0000	11.36
27	VQPGPRLPN	97	0.8000	9.09
28	VAALVRSRY	350	0.8000	9.09

29	LTWQLPAEP	396	0.8000	9.09
30	VAFAGAAAL	430	0.7600	8.64
31	MEQRGACSV	47	0.6000	6.82
32	VAGQPGNDG	133	0.6000	6.82
33	VAVLAGAIV	179	0.5000	5.68
34	INVSTITCL	197	0.4600	5.23
35	LAATVVVAG	8	0.4000	4.55
36	VGIAAPGEN	303	0.4000	4.55
37	IARRRREPT	451	0.4000	4.55
38	MIRAAFACL	0	0.3600	4.09
39	LPAAWQFSR	76	0.3000	3.41
40	IVHAADLGA	186	0.3000	3.41
41	VASLTSAGQ	284	0.3000	3.41
42	VALSGTSYA	335	0.3000	3.41
43	LSVLVGLTA	438	0.3000	3.41
44	VLVGLTAAT	440	0.3000	3.41
45	LVRSRYPGL	353	0.2600	2.95
46	WQPYVLSVA	277	0.2000	2.27

ALLELE: DRB1_1302	Threshold for 3 % with score: 2.1	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.9000	44.32
2	VVRRLTATA	366	2.8000	31.82
3	VAIARRRRE	449	2.4000	27.27
4	LGAKVINVS	192	2.2000	25.00
5	LVGLTAATV	441	2.0000	22.73
6	VAPAARLLS	145	1.8000	20.45
7	IRAAFACLA	1	1.2000	13.64
8	WQPYVLSVA	277	1.2000	13.64
9	IRYAAVDKD	220	1.1000	12.50
10	YVLSVASLT	280	1.1000	12.50
11	YVSGVAALV	346	1.1000	12.50

12	IVGAGNLDA	384	1.1000	12.50
13	VAPMEQRGA	44	1.0000	11.36
14	IVAAAGNTG	231	0.9000	10.23
15	FSMPGPWVG	296	0.9000	10.23
16	WVGIAAPGE	302	0.9000	10.23
17	VRRLTATAH	367	0.9000	10.23
18	FAGAAALSV	432	0.9000	10.23
19	MVDQAALGA	210	0.8000	9.09
20	MLNLPAAWQ	73	0.7000	7.95
21	LAGAIVHAA	182	0.7000	7.95
22	VLSVASLTS	281	0.7000	7.95
23	LNLPAAWQF	74	0.6000	6.82
24	LVAGIVAGQ	128	0.6000	6.82
25	VVVAGWWTP	12	0.3000	3.41
26	LGAAIRYAA	216	0.3000	3.41
27	WWQPYVLSV	276	0.3000	3.41
28	LNATEVRR	361	0.3000	3.41
29	VAGWWTPPA	14	0.2000	2.27
30	LVALSGTSY	334	0.2000	2.27
31	LTAATVAIA	444	0.2000	2.27
32	FACLAATVV	5	-0.2000	0
33	WAIGPPVVD	23	-0.2000	0
34	VQPGPRLPN	97	-0.2000	0
35	VAALVRSRY	350	-0.2000	0
36	LTWQLPAEP	396	-0.2000	0
37	VAFAGAAAL	430	-0.2400	0
38	WAGVTSVSI	265	-0.3000	0
39	MEQRGACSV	47	-0.4000	0
40	VAGQPGNDG	133	-0.4000	0
41	WQFSRGEQ	80	-0.5000	0
42	VAVLAGAIV	179	-0.5000	0

ALLELE: DRB1_1304 Threshold for 3 % with score: Highest Score achievable by any peptide: 9

Rank	Sequence	At Position	Score	% of Highest Score
1	VAIARRRE	449	5.0000	55.56
2	IRAMSTKFS	154	4.5000	50.00
3	VVRRLTATA	366	3.8000	42.22
4	IRYAAVDKD	220	3.7000	41.11
5	VRRLTATAH	367	3.7000	41.11
6	MLNLPAAWQ	73	3.2000	35.56
7	LVAGIVAGQ	128	3.1000	34.44
8	LGAKVINVS	192	2.8000	31.11
9	VAPAARLLS	145	2.4000	26.67
10	LVGLTAATV	441	2.3000	25.56
11	IRAAFACLA	1	2.2000	24.44
12	VRSRYPGLN	354	2.2000	24.44
13	IVGAGNLDA	384	2.1000	23.33
14	VAPMEQRGA	44	2.0000	22.22
15	VQPGPRLPN	97	2.0000	22.22
16	MVDQAALGA	210	1.8000	20.00
17	IVAAAGNTG	231	1.8000	20.00
18	VASLTSAGQ	284	1.8000	20.00
19	LAGAIVHAA	182	1.7000	18.89
20	VGIAAPGEN	303	1.6000	17.78
21	VAIIDTGVQ	90	1.5000	16.67
22	WVGIAAPGE	302	1.5000	16.67
23	LGAAIRYAA	216	1.3000	14.44
24	VLSVASLTS	281	1.3000	14.44
25	VAGWWTPPA	14	1.2000	13.33
26	LTAATVAIA	444	1.2000	13.33
27	VINVSTITC	196	1.0000	11.11
28	LVALSGTSY	334	1.0000	11.11
29	VAFAGAAAL	430	0.8000	8.89
30	VVVAGWWTP	12	0.7000	7.78
31	LNLPAAWQF	74	0.6000	6.67
32	IVAGQPGND	132	0.6000	6.67

33	LTDLSRPDD	253	0.6000	6.67
34	VAALVRSRY	350	0.6000	6.67
35	IARRRREPT	451	0.6000	6.67
36	VAGQPGNDG	133	0.5000	5.56
37	INVSTITCL	197	0.5000	5.56
38	VLVGLTAAT	440	0.5000	5.56
39	MIRAAFACL	0	0.4000	4.44
40	WAIGPPVVD	23	0.4000	4.44
41	LAATVVVAG	8	0.3000	3.33
42	LLSIRAMST	151	0.3000	3.33
43	IVHAADLGA	186	0.3000	3.33
44	YVLSVASLT	280	0.3000	3.33
45	VALSGTSYA	335	0.3000	3.33
46	LVRSRYPGL	353	0.3000	3.33

ALLELE: DRB1_1305	Threshold for 3 % with score: 2.2	Highest Score achievable by any peptide: 8.7
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.9000	44.83
2	VLSVASLTS	281	3.1000	35.63
3	VAPAARLLS	145	2.9000	33.33
4	WVGIAAPGE	302	2.8500	32.76
5	LVGLTAATV	441	2.7000	31.03
6	VINVSTITC	196	2.6000	29.89
7	IVGAGNLDA	384	2.2000	25.29
8	FAGAAALSV	432	2.0000	22.99
9	LLSIRAMST	151	1.9000	21.84
10	VVRRLTATA	366	1.9000	21.84
11	VAIIDTGVQ	90	1.6000	18.39
12	MLNLPAAWQ	73	1.4000	16.09
13	FSGVAPAAR	142	1.3000	14.94
14	VSGVAALVR	347	1.3000	14.94
15	IRAAFACLA	1	1.2000	13.79

16	WWQPYVLSV	276	1.2000	13.79
17	VRRLTATAH	367	1.2000	13.79
18	VSTITCLPA	199	1.1000	12.64
19	LSVLVGLTA	438	1.1000	12.64
20	MVDQAALGA	210	0.9000	10.34
21	YVSGVAALV	346	0.9000	10.34
22	VAIARRRRE	449	0.8000	9.20
23	VQPGPRLPN	97	0.7000	8.05
24	YVLSVASLT	280	0.6000	6.90
25	WAGVTSVSI	265	0.5000	5.75
26	VGIAAPGEN	303	0.5000	5.75
27	LVALSGTSY	334	0.5000	5.75
28	LVAGIVAGQ	128	0.4000	4.60
29	IVHAADLGA	186	0.4000	4.60
30	LNATEVVRR	361	0.3000	3.45
31	VAVLAGAIV	179	0.2000	2.30
32	LAGAIVHAA	182	0.2000	2.30
33	VRSRYPGLN	354	0.2000	2.30
34	LTAATVAIA	444	0.2000	2.30
35	FACLAATVV	5	0.1000	1.15
36	LGAAIRYAA	216	0.1000	1.15
37	VAALVRSRY	350	0.1000	1.15
38	IRYAAVDKD	220	-0.1000	0
39	FSMPGPWVG	296	-0.1000	0
40	VAGWWTPPA	14	-0.1500	0
41	LGAKVINVS	192	-0.2000	0
42	IVAAAGNTG	231	-0.2000	0
43	YPGLNATEV	358	-0.2000	0
44	VAFAGAAAL	430	-0.2400	0

ALLELE: DRB1_1307	Threshold for 3 % with score: 0.6	Highest Score achievable by any peptide: 6.8
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Rank	Sequence	At Position	Score	% of Highest Score
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1	IRAMSTKFS	154	2.9000	42.65
2	VAIIDTGVQ	90	2.2000	32.35
3	MLNLPAAWQ	73	2.1000	30.88
4	VVRRLTATA	366	1.9000	27.94
5	LVGLTAATV	441	1.7000	25.00
6	IRAAFACLA	1	1.2000	17.65
7	LVAGIVAGQ	128	1.1000	16.18
8	VINVSTITC	196	1.0000	14.71
9	VLSVASLTS	281	0.9000	13.24
10	VAPAARLLS	145	0.7000	10.29
11	VASLTSAGQ	284	0.7000	10.29
12	VRRLTATAH	367	0.6800	10.00
13	IVGAGNLDA	384	0.4000	5.88
14	WVGIAAPGE	302	0.3000	4.41
15	LTAATVAIA	444	0.2000	2.94
16	YVLSVASLT	280	-0.1000	0
17	YVSGVAALV	346	-0.1000	0
18	FSGVAPAAR	142	-0.2000	0
19	WQPYVLSVA	277	-0.3000	0
20	LLSIRAMST	151	-0.4000	0
21	VGIAAPGEN	303	-0.4000	0
22	LAGAIVHAA	182	-0.5000	0
23	VAPMEQRGA	44	-0.6000	0
24	LGAAIRYAA	216	-0.6000	0
25	VSTITCLPA	199	-0.7000	0
26	VRSRYPGLN	354	-0.7000	0
27	LSVLVGLTA	438	-0.7000	0
28	VAVLAGAIV	179	-0.8000	0
29	VHAADLGAK	187	-0.8000	0
30	FAGAAALSV	432	-0.8000	0
31	VAIARRRRE	449	-0.8000	0
32	LGAKVINVS	192	-0.9000	0
33	MVDQAALGA	210	-0.9000	0
34	IRYAAVDKD	220	-0.9000	0

35	WAGVTSVSI	265	-0.9000	0
36	VIVAAAGNT	230	-1.1000	0
37	VALSGTSYA	335	-1.2000	0
38	VAALVRSRY	350	-1.2000	0
39	VAFAGAAAL	430	-1.2000	0
40	VAGWWTPPA	14	-1.3000	0
41	WQFSRGEQ	80	-1.3000	0
42	IVHAADLGA	186	-1.4000	0
43	YAAVDKDAV	222	-1.4000	0
44	MIRAAFACL	0	-1.6000	0
45	LDVAVLGA	177	-1.6000	0

ALLELE: DRB1_1311 Threshold for 3 % with score: 2.0 Highest Score achievable by any peptide: 8.3

Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	54.22
2	VLSVASLTS	281	3.7000	44.58
3	VINVSTITC	196	3.6000	43.37
4	VAPAARLLS	145	3.5000	42.17
5	VAIIDTGVQ	90	3.3000	39.76
6	IVGAGNLDA	384	3.2000	38.55
7	MLNLPAAWQ	73	3.1000	37.35
8	VVRRLTATA	366	2.9000	34.94
9	VRRLTATAH	367	2.7800	33.49
10	LVGLTAATV	441	2.7000	32.53
11	IRAAFACLA	1	2.2000	26.51
12	LLSIRAMST	151	2.2000	26.51
13	LVAGIVAGQ	128	2.1000	25.30
14	VSTITCLPA	199	2.1000	25.30
15	LSVLVGLTA	438	2.1000	25.30
16	MVDQAALGA	210	1.9000	22.89
17	VASLTSAGQ	284	1.7000	20.48
18	IVHAADLGA	186	1.4000	16.87

19	LAGAIVHAA	182	1.2000	14.46
20	LTAATVAIA	444	1.2000	14.46
21	LGAAIRYAA	216	1.1000	13.25
22	VQPGPRLPN	97	0.9000	10.84
23	VAGWWTPPA	14	0.8500	10.24
24	VSGVAALVR	347	0.8000	9.64
25	VGIAAPGEN	303	0.7000	8.43
26	VAPMEQRGA	44	0.6000	7.23
27	WVGIAAPGE	302	0.4500	5.42
28	LGAKVINVS	192	0.4000	4.82
29	VRSRYPGLN	354	0.4000	4.82
30	VAIARRRRE	449	0.4000	4.82
31	VHAADLGAK	187	0.3000	3.61
32	VTSVSIPSW	268	0.2500	3.01
33	VAVLAGAIV	179	0.2000	2.41
34	LVALSGTSY	334	0.2000	2.41
35	IRYAAVDKD	220	-0.2000	0
36	VALSGTSYA	335	-0.2000	0
37	VAALVRSRY	350	-0.2000	0
38	LNATEVVRR	361	-0.2000	0
39	VAFAGAAAL	430	-0.2000	0
40	LVRSRYPGL	353	-0.3500	0
41	LDAVAALTW	390	-0.4000	0
42	VGLTAATVA	442	-0.4000	0
43	LTSAGQPSK	287	-0.4500	0

ALLELE: DRB1_1321	Threshold for 3 % with score: 2.2	Highest Score achievable by any peptide: 8.9		
Rank	Sequence	At Position	Score	% of Highest Score
1	WVGIAAPGE	302	4.4500	50.00
2	IRAMSTKFS	154	3.5000	39.33
3	VAIIDTGVQ	90	3.1000	34.83
4	VRRLTATAH	367	3.0000	33.71

5	MLNLPAAWQ	73	2.9000	32.58
6	VLSVASLTS	281	2.7000	30.34
7	VINVSTITC	196	2.6000	29.21
8	VAPAARLLS	145	2.5000	28.09
9	VAIARRRRE	449	2.4000	26.97
10	IVGAGNLDA	384	2.2000	24.72
11	LLSIRAMST	151	2.1000	23.60
12	LVGLTAATV	441	2.0000	22.47
13	VQPGPRLPN	97	1.9000	21.35
14	LVAGIVAGQ	128	1.9000	21.35
15	VVRRLTATA	366	1.9000	21.35
16	VGIAAPGEN	303	1.7000	19.10
17	IRYAAVDKD	220	1.5000	16.85
18	VASLTSAGQ	284	1.5000	16.85
19	VRSRYPGLN	354	1.4000	15.73
20	FAGAAALSV	432	1.3000	14.61
21	IRAAFACLA	1	1.2000	13.48
22	VSTITCLPA	199	1.1000	12.36
23	LSVLVGLTA	438	1.1000	12.36
24	MVDQAALGA	210	0.9000	10.11
25	YVLSVASLT	280	0.8000	8.99
26	LTDLSRPDD	253	0.7500	8.43
27	WAIGPPVVD	23	0.7000	7.87
28	WQFSRGEGQ	80	0.6000	6.74
29	VESTDGLTD	113	0.5000	5.62
30	IVAGQPGND	132	0.5000	5.62
31	WWQPYVLSV	276	0.5000	5.62
32	VSGVIPGTD	55	0.4000	4.49
33	IVHAADLGA	186	0.4000	4.49
34	LVALSGTSY	334	0.3000	3.37
35	LAGAIVHAA	182	0.2000	2.25
36	YVSGVAALV	346	0.2000	2.25
37	LTAATVAIA	444	0.2000	2.25
38	VTSVSIPSW	268	0.1500	1.69

39	LGAAIRYAA	216	0.1000	1.12
40	VIVAAAGNT	230	-0.1000	0
41	VAALVRSRY	350	-0.1000	0
42	VAGWWTPPA	14	-0.1500	0
43	FSGVAPAAR	142	-0.2000	0
44	FSPRTSGGD	161	-0.2000	0

ALLELE: DRB1_1322	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.5000	53.57
2	VVRRLTATA	366	3.8000	45.24
3	LGAKVINVS	192	2.8000	33.33
4	VRRLTATAH	367	2.4800	29.52
5	MLNLPAAWQ	73	2.4000	28.57
6	VAPAARLLS	145	2.4000	28.57
7	LVAGIVAGQ	128	2.3000	27.38
8	IRAAFACLA	1	2.2000	26.19
9	IVGAGNLDA	384	2.1000	25.00
10	VAPMEQRGA	44	2.0000	23.81
11	LVGLTAATV	441	2.0000	23.81
12	VAIARRRRE	449	2.0000	23.81
13	MVDQAALGA	210	1.8000	21.43
14	LAGAIVHAA	182	1.7000	20.24
15	LGAAIRYAA	216	1.3000	15.48
16	VLSVASLTS	281	1.3000	15.48
17	VAGWWTPPA	14	1.2000	14.29
18	LTAATVAIA	444	1.2000	14.29
19	VINVSTITC	196	1.0000	11.90
20	IRYAAVDKD	220	1.0000	11.90
21	VASLTSAGQ	284	1.0000	11.90
22	VAIIDTGVQ	90	0.7000	8.33
23	IVAAAGNTG	231	0.5000	5.95

24	VVVAGWWTP	12	0.3000	3.57
25	IVHAADLGA	186	0.3000	3.57
26	VALSGTSYA	335	0.3000	3.57
27	LSVLVGLTA	438	0.3000	3.57
28	WQPYVLSVA	277	0.2000	2.38
29	VRSRYPLGN	354	0.2000	2.38
30	VLAGAIVHA	181	0.1000	1.19
31	LVALSGTSY	334	-0.1000	0
32	LNATEVVRR	361	-0.2000	0
33	LTWQLPAEP	396	-0.2000	0
34	VAFAGAAAL	430	-0.2000	0
35	LNLPAAWQF	74	-0.3000	0
36	IARRRREPT	451	-0.3000	0
37	MEQRGACSV	47	-0.4000	0
38	VGIAAPGEN	303	-0.4000	0
39	VLVGLTAAT	440	-0.4000	0
40	VAVLAGAIV	179	-0.5000	0
41	INVSTITCL	197	-0.5000	0
42	VSTITCLPA	199	-0.5000	0
43	LSVASL TSA	282	-0.5000	0

ALLELE: DRB1_1323	Threshold for 3 % with score: 1.3	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	3.5000	41.67
2	VVRRLTATA	366	2.8000	33.33
3	LGAKVINVS	192	1.8000	21.43
4	VRRLTATAH	367	1.4800	17.62
5	MLNLPAAWQ	73	1.4000	16.67
6	VAPAARLLS	145	1.4000	16.67
7	LVAGIVAGQ	128	1.3000	15.48
8	IRAAFACLA	1	1.2000	14.29
9	WQPYVLSVA	277	1.2000	14.29

10	IVGAGNLDA	384	1.1000	13.10
11	VAPMEQRGA	44	1.0000	11.90
12	LVGLTAATV	441	1.0000	11.90
13	VAIARRRRE	449	1.0000	11.90
14	MVDQAALGA	210	0.8000	9.52
15	LAGAIVHAA	182	0.7000	8.33
16	YVLSVASLT	280	0.4000	4.76
17	LGAAIRYAA	216	0.3000	3.57
18	VLSVASLTS	281	0.3000	3.57
19	VAGWWTPPA	14	0.2000	2.38
20	WQFSRGEGQ	80	0.2000	2.38
21	LTAATVAIA	444	0.2000	2.38
22	YVSGVAALV	346	0.1000	1.19
23	FAGAAALSV	432	-0.1000	0
24	VAIIDTGVQ	90	-0.3000	0
25	IVAAAGNTG	231	-0.5000	0
26	FSMPGPWVG	296	-0.5000	0
27	WVGIAAPGE	302	-0.5000	0
28	VVVAGWWTP	12	-0.7000	0
29	IVHAADLGA	186	-0.7000	0
30	WWQPYVLSV	276	-0.7000	0
31	VALSGTSYA	335	-0.7000	0
32	LSVLVGLTA	438	-0.7000	0
33	VRSRYPGLN	354	-0.8000	0
34	VLAGAIVHA	181	-0.9000	0
35	VQPGPRLPN	97	-1.0000	0
36	LTATAHRGA	370	-1.0000	0
37	LVALSGTSY	334	-1.1000	0
38	FACLAATVV	5	-1.2000	0
39	WAGVTSVSI	265	-1.2000	0
40	LNATEVVRR	361	-1.2000	0
41	LTWQLPAEP	396	-1.2000	0
42	VAFAGAAAL	430	-1.2000	0

ALLELE: DRB1_1327	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.9000	55.68
2	VRRRLTATA	366	3.8000	43.18
3	VAIARRRRE	449	3.4000	38.64
4	LGAKVINVS	192	3.2000	36.36
5	LVGLTAATV	441	3.0000	34.09
6	VAPAARLLS	145	2.8000	31.82
7	IRAAFACLA	1	2.2000	25.00
8	IRYAAVDKD	220	2.1000	23.86
9	IVGAGNLDA	384	2.1000	23.86
10	VAPMEQRGA	44	2.0000	22.73
11	IVAAAGNTG	231	1.9000	21.59
12	VRRLTATAH	367	1.9000	21.59
13	MVDQAALGA	210	1.8000	20.45
14	MLNLPAAWQ	73	1.7000	19.32
15	LAGAIVHAA	182	1.7000	19.32
16	VLSVASLTS	281	1.7000	19.32
17	LNLPAAWQF	74	1.6000	18.18
18	LVAGIVAGQ	128	1.6000	18.18
19	VVVAGWWTP	12	1.3000	14.77
20	LGAAIRYAA	216	1.3000	14.77
21	LNATEVVRR	361	1.3000	14.77
22	VAGWWTPPA	14	1.2000	13.64
23	LVALSGTSY	334	1.2000	13.64
24	LTAATVAIA	444	1.2000	13.64
25	VINVSTITC	196	1.0000	11.36
26	VRSRYPGLN	354	1.0000	11.36
27	VQPGPRLPN	97	0.8000	9.09
28	VAALVRSRY	350	0.8000	9.09
29	LTWQLPAEP	396	0.8000	9.09
30	VAFAGAAAL	430	0.7600	8.64

31	MEQRGACSV	47	0.6000	6.82
32	VAGQPGNDG	133	0.6000	6.82
33	VAVLAGAIV	179	0.5000	5.68
34	INVSTITCL	197	0.4600	5.23
35	LAATVVVAG	8	0.4000	4.55
36	VGIAAPGEN	303	0.4000	4.55
37	IARRRREPT	451	0.4000	4.55
38	MIRAAFACL	0	0.3600	4.09
39	LPAAWQFSR	76	0.3000	3.41
40	IVHAADLGA	186	0.3000	3.41
41	VASLTSAGQ	284	0.3000	3.41
42	VALSGTSYA	335	0.3000	3.41
43	LSVLVGLTA	438	0.3000	3.41
44	VLVGLTAAT	440	0.3000	3.41
45	LVRSRYPGL	353	0.2600	2.95
46	WQPYVLSVA	277	0.2000	2.27

ALLELE: DRB1_1328		Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8	
Rank	Sequence	At Position	Score	% of Highest Score
1	IRAMSTKFS	154	4.9000	55.68
2	VVRRLTATA	366	3.8000	43.18
3	VAIARRRRE	449	3.4000	38.64
4	LGAKVINVS	192	3.2000	36.36
5	LVGLTAATV	441	3.0000	34.09
6	VAPAARLLS	145	2.8000	31.82
7	IRAAFACLA	1	2.2000	25.00
8	IRYAAVDKD	220	2.1000	23.86
9	IVGAGNLDA	384	2.1000	23.86
10	VAPMEQRGA	44	2.0000	22.73
11	IVAAAGNTG	231	1.9000	21.59
12	VRRLTATAH	367	1.9000	21.59
13	MVDQAALGA	210	1.8000	20.45

14	MLNLPAAWQ	73	1.7000	19.32
15	LAGAIVHAA	182	1.7000	19.32
16	VLSVASLTS	281	1.7000	19.32
17	LNLPAAWQF	74	1.6000	18.18
18	LVAGIVAGQ	128	1.6000	18.18
19	VVVAGWWTP	12	1.3000	14.77
20	LGAAIRYAA	216	1.3000	14.77
21	LNATEVVRR	361	1.3000	14.77
22	VAGWWTPPA	14	1.2000	13.64
23	LVALSGTSY	334	1.2000	13.64
24	LTAATVAIA	444	1.2000	13.64
25	VINVSTITC	196	1.0000	11.36
26	VRSRYPGLN	354	1.0000	11.36
27	VQPGPRLPN	97	0.8000	9.09
28	VAALVRSRY	350	0.8000	9.09
29	LTWQLPAEP	396	0.8000	9.09
30	VAFAGAAAL	430	0.7600	8.64
31	MEQRGACSV	47	0.6000	6.82
32	VAGQPGNDG	133	0.6000	6.82
33	VAVLAGAIV	179	0.5000	5.68
34	INVSTITCL	197	0.4600	5.23
35	LAATVVVAG	8	0.4000	4.55
36	VGIAAPGEN	303	0.4000	4.55
37	IARRRREPT	451	0.4000	4.55
38	MIRAAFACL	0	0.3600	4.09
39	LPAAWQFSR	76	0.3000	3.41
40	IVHAADLGA	186	0.3000	3.41
41	VASLTSAGQ	284	0.3000	3.41
42	VALSGTSYA	335	0.3000	3.41
43	LSVLVGLTA	438	0.3000	3.41
44	VLVGLTAAT	440	0.3000	3.41
45	LVRSRYPGL	353	0.2600	2.95
46	WQPYVLSVA	277	0.2000	2.27

ALLELE: DRB1_1501	Threshold for 3 % with score: 3.25	Highest Score achievable by any peptide: 9.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IVGAGNLDA	384	4.9000	50.00
2	IVHAADLGA	186	3.8000	38.78
3	LVRSRYPGL	353	3.7000	37.76
4	VLSVASLTS	281	3.6000	36.73
5	WQPYVLSVA	277	3.5000	35.71
6	LLSIRAMST	151	3.3000	33.67
7	VINVSTITC	196	3.2600	33.27
8	VQPGPRLPN	97	3.2000	32.65
9	LSVLVGLTA	438	3.1000	31.63
10	LVGLTAATV	441	3.1000	31.63
11	VVRRLTATA	366	2.9600	30.20
12	VAPAARLLS	145	2.9000	29.59
13	LVAIIDTGV	89	2.8000	28.57
14	IRAMSTKFS	154	2.5600	26.12
15	IVAAAGNTG	231	2.5000	25.51
16	VRRLTATAH	367	2.5000	25.51
17	LVALSGTSY	334	2.4000	24.49
18	IRAAFACLA	1	2.2000	22.45
19	VSTITCLPA	199	2.2000	22.45
20	LGAAIRYAA	216	2.2000	22.45
21	MIRAAFACL	0	2.0000	20.41
22	MVDQAALGA	210	1.9000	19.39
23	YVLSVASLT	280	1.9000	19.39
24	VAVLAGAIV	179	1.8000	18.37
25	INVSTITCL	197	1.7500	17.86
26	VVVAGWWTP	12	1.7000	17.35
27	LNLPAAWQF	74	1.7000	17.35
28	VIPGTDPGV	58	1.6000	16.33
29	YVSGVAALV	346	1.6000	16.33
30	VIVAAAGNT	230	1.4000	14.29

31	FAGAAALSV	432	1.4000	14.29
32	VGLTAATVA	442	1.4000	14.29
33	VLGAIVHA	181	1.3500	13.78
34	VAFAGAAAL	430	1.3000	13.27
35	VLVGLTAAT	440	1.2600	12.86
36	VRSRYPLN	354	1.2000	12.24
37	WAGVTSVSI	265	1.0000	10.20
38	VSGVAALVR	347	1.0000	10.20
39	IARRRREPT	451	1.0000	10.20
40	VALSGTSYA	335	0.9600	9.80
41	VAAAGNTGA	232	0.9000	9.18
42	VAALVRSRY	350	0.9000	9.18
43	VAGWWTPPA	14	0.8600	8.78
44	VVAGWWTPP	13	0.8000	8.16
45	MEQRGACSV	47	0.6000	6.12
46	LSVASLTS	282	0.6000	6.12

ALLELE: DRB1_1502	Threshold for 3 % with score: 3.25	Highest Score achievable by any peptide: 9.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	WQPYVLSVA	277	4.5000	45.92
2	IVGAGNLDA	384	3.9000	39.80
3	YVLSVASLT	280	2.9000	29.59
4	IVHAADLGA	186	2.8000	28.57
5	LVRSRYPGL	353	2.7000	27.55
6	VLSVASLTS	281	2.6000	26.53
7	YVSGVAALV	346	2.6000	26.53
8	FAGAAALSV	432	2.4000	24.49
9	LLSIRAMST	151	2.3000	23.47
10	VINVSTITC	196	2.2600	23.06
11	VQPGPRLPN	97	2.2000	22.45
12	LSVLVGLTA	438	2.1000	21.43
13	LVGLTAATV	441	2.1000	21.43

14	WAGVTSVSI	265	2.0000	20.41
15	VVRRLTATA	366	1.9600	20.00
16	VAPAARLLS	145	1.9000	19.39
17	LVAIIDTGV	89	1.8000	18.37
18	IRAMSTKFS	154	1.5600	15.92
19	IVAAAGNTG	231	1.5000	15.31
20	WWQPYVLSV	276	1.5000	15.31
21	VRRLTATAH	367	1.5000	15.31
22	LVALSGTSY	334	1.4000	14.29
23	WVGIAAPGE	302	1.3000	13.27
24	IRAAFACLA	1	1.2000	12.24
25	VSTITCLPA	199	1.2000	12.24
26	LGAAIRYAA	216	1.2000	12.24
27	MIRAAFACL	0	1.0000	10.20
28	FACLAATVV	5	1.0000	10.20
29	WWTPPAWAI	17	0.9000	9.18
30	FSRGEGQLV	82	0.9000	9.18
31	MVDQAALGA	210	0.9000	9.18
32	VAVLAGAIV	179	0.8000	8.16
33	INVSTITCL	197	0.7500	7.65
34	VVVAGWWTP	12	0.7000	7.14
35	LNLPAAWQF	74	0.7000	7.14
36	YPGLNATEV	358	0.7000	7.14
37	VIPGTDPGV	58	0.6000	6.12
38	VIVAAAGNT	230	0.4000	4.08
39	FSMPGPWVG	296	0.4000	4.08
40	WQLPAEPGG	398	0.4000	4.08
41	VGLTAATVA	442	0.4000	4.08
42	VLAGAIVHA	181	0.3500	3.57
43	YAAGYVSGV	342	0.3000	3.06
44	VAFAGAAAL	430	0.3000	3.06
45	VLVGLTAAT	440	0.2600	2.65
46	VRSRYPGLN	354	0.2000	2.04

ALLELE: DRB1_1506	Threshold for 3 % with score: 3.1	Highest Score achievable by any peptide: 9.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	IVGAGNLDA	384	4.9000	50.00
2	IVHAADLGA	186	3.8000	38.78
3	LVRSRYPGL	353	3.7000	37.76
4	VLSVASLTS	281	3.6000	36.73
5	WQPYVLSVA	277	3.5000	35.71
6	LLSIRAMST	151	3.3000	33.67
7	VINVSTITC	196	3.2600	33.27
8	VQPGPRLPN	97	3.2000	32.65
9	LSVLVGLTA	438	3.1000	31.63
10	LVGLTAATV	441	3.1000	31.63
11	VVRRLTATA	366	2.9600	30.20
12	VAPAARLLS	145	2.9000	29.59
13	LVAIIDTGV	89	2.8000	28.57
14	IRAMSTKFS	154	2.5600	26.12
15	IVAAAGNTG	231	2.5000	25.51
16	VRRLTATAH	367	2.5000	25.51
17	LVALSGTSY	334	2.4000	24.49
18	IRAAFACLA	1	2.2000	22.45
19	VSTITCLPA	199	2.2000	22.45
20	LGAAIRYAA	216	2.2000	22.45
21	MIRAAFACL	0	2.0000	20.41
22	MVDQAALGA	210	1.9000	19.39
23	YVLSVASLT	280	1.9000	19.39
24	VAVLAGAIV	179	1.8000	18.37
25	INVSTITCL	197	1.7500	17.86
26	VVVAGWWTP	12	1.7000	17.35
27	LNLPAAWQF	74	1.7000	17.35
28	VIPGTDPGV	58	1.6000	16.33
29	YVSGVAALV	346	1.6000	16.33
30	VIVAAAGNT	230	1.4000	14.29

31	FAGAAALSV	432	1.4000	14.29
32	VGLTAATVA	442	1.4000	14.29
33	VLGAIVHA	181	1.3500	13.78
34	VAFAGAAAL	430	1.3000	13.27
35	VLVGLTAAT	440	1.2600	12.86
36	VRSRYPGLN	354	1.2000	12.24
37	WAGVTSVSI	265	1.0000	10.20
38	VSGVAALVR	347	1.0000	10.20
39	IARRRREPT	451	1.0000	10.20
40	VALSGTSYA	335	0.9600	9.80
41	VAAAGNTGA	232	0.9000	9.18
42	VAALVRSRY	350	0.9000	9.18
43	VAGWWTPPA	14	0.8600	8.78
44	VVAGWWTPP	13	0.8000	8.16
45	MEQRGACSV	47	0.6000	6.12
46	LSVASL TSA	282	0.6000	6.12

ALLELE: DRB5_0101	Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	VRRLTATAH	367	3.8000	38.78
2	FSGVAPAAR	142	3.7000	37.76
3	IRAMSTKFS	154	3.7000	37.76
4	VSGVAALVR	347	3.1000	31.63
5	LVALSGTSY	334	3.0000	30.61
6	WVGIAAPGE	302	2.4000	24.49
7	VAIIDTGVQ	90	2.3000	23.47
8	YVLSVASLT	280	2.2000	22.45
9	VHAADLGAK	187	2.1000	21.43
10	VINVSTITC	196	2.1000	21.43
11	VLSVASLTS	281	2.1000	21.43
12	MLNLPAAWQ	73	1.8000	18.37
13	VGIAAPGEN	303	1.8000	18.37

14	LLSIRAMST	151	1.7000	17.35
15	IVAAAGNTG	231	1.7000	17.35
16	WAGVTSVSI	265	1.7000	17.35
17	LVGLTAATV	441	1.7000	17.35
18	IRAAFACLA	1	1.2000	12.24
19	LPAAWQFSR	76	1.1000	11.22
20	VAFAGAAAL	430	1.1000	11.22
21	VGLTAATVA	442	1.1000	11.22
22	WQFSRGEGQ	80	1.0000	10.20
23	VIVAAAGNT	230	1.0000	10.20
24	LVRSRYPGL	353	1.0000	10.20
25	LNATEVVRR	361	1.0000	10.20
26	VAPMEQRGA	44	0.9000	9.18
27	LNLPAAWQF	74	0.9000	9.18
28	FACLAATVV	5	0.7000	7.14
29	VSTITCLPA	199	0.6000	6.12
30	FSMPGPWVG	296	0.6000	6.12
31	IVGAGNLDA	384	0.6000	6.12
32	FAGAAALSV	432	0.6000	6.12
33	LVAIIDTGV	89	0.5000	5.10
34	YVSGVAALV	346	0.5000	5.10
35	VRSRYPGLN	354	0.5000	5.10
36	MIRAAFACL	0	0.4000	4.08
37	YPGLNATEV	358	0.4000	4.08
38	VAGIVAGQP	129	0.3000	3.06
39	LSVLVGLTA	438	0.1000	1.02
40	IVHAADLGA	186	-0.1000	0
41	LTSAGQPSK	287	-0.1000	0
42	VAIARRRRE	449	-0.1000	0

ALLELE: DRB5_0105	Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9.8		
Rank	Sequence	At Position	Score	% of Highest Score

1	VRRLTATAH	367	3.8000	38.78
2	FSGVAPAAR	142	3.7000	37.76
3	IRAMSTKFS	154	3.7000	37.76
4	VSGVAALVR	347	3.1000	31.63
5	LVALSGTSY	334	3.0000	30.61
6	WVGIAAPGE	302	2.4000	24.49
7	VAIIDTGVQ	90	2.3000	23.47
8	YVLSVASLT	280	2.2000	22.45
9	VHAADLGAK	187	2.1000	21.43
10	VINVSTITC	196	2.1000	21.43
11	VLSVASLTS	281	2.1000	21.43
12	MLNLPAAWQ	73	1.8000	18.37
13	VGIAAPGEN	303	1.8000	18.37
14	LLSIRAMST	151	1.7000	17.35
15	IVAAAGNTG	231	1.7000	17.35
16	WAGVTSVSI	265	1.7000	17.35
17	LVGLTAATV	441	1.7000	17.35
18	IRAAFACLA	1	1.2000	12.24
19	LPAAWQFSR	76	1.1000	11.22
20	VAFAGAAAL	430	1.1000	11.22
21	VGLTAATVA	442	1.1000	11.22
22	WQFSRGEGQ	80	1.0000	10.20
23	VIVAAAGNT	230	1.0000	10.20
24	LVRSRYPGL	353	1.0000	10.20
25	LNATEVVRR	361	1.0000	10.20
26	VAPMEQRGA	44	0.9000	9.18
27	LNLPAAWQF	74	0.9000	9.18
28	FACLAATVV	5	0.7000	7.14
29	VSTITCLPA	199	0.6000	6.12
30	FSMPGPWVG	296	0.6000	6.12
31	IVGAGNLDA	384	0.6000	6.12
32	FAGAAALSV	432	0.6000	6.12
33	LVAIIDTGV	89	0.5000	5.10
34	YVSGVAALV	346	0.5000	5.10

35	VRSRYPLGN	354	0.5000	5.10
36	MIRAAFACL	0	0.4000	4.08
37	YPGLNATEV	358	0.4000	4.08
38	VAGIVAGQP	129	0.3000	3.06
39	LSVLVGLTA	438	0.1000	1.02
40	IVHAADLGA	186	-0.1000	0
41	LTSAGQPSK	287	-0.1000	0
42	VAIARRRRE	449	-0.1000	0