

Supplementary

Table S1 Human leucocyte antigen (HLA)-A, B, C, DRB1, and DQB1 allele carrier frequency among the different titers of anti-soluble liver antigen/liver pancreas (anti-SLA/LP) in patients with anti-SLA/LP-positive autoimmune hepatitis

Allele	Anti-SLA/LP (20–200 RU/mL) (n=27)		Anti-SLA/LP (≥200 RU/mL) (n=35)		P value
	n	%	n	%	
A*01:01	0	0.0	4	11.4	0.1253
A*02:01	9	33.3	10	28.6	0.7837
A*02:03	1	3.7	2	5.7	1.0000
A*02:05	1	3.7	0	0.0	0.4355
A*02:06	3	11.1	4	11.4	1.0000
A*02:07	1	3.7	5	14.3	0.2198
A*02:10	1	3.7	0	0.0	0.4355
A*03:01	1	3.7	1	2.9	1.0000
A*03:02	0	0.0	1	2.9	1.0000
A*11:01	8	29.6	10	28.6	1.0000
A*11:02	1	3.7	0	0.0	0.4355
A*24:02	9	33.3	11	31.4	1.0000
A*24:03	2	7.4	0	0.0	0.1856
A*24:07	1	3.7	0	0.0	0.4355
A*25:01	0	0.0	1	2.9	1.0000
A*26:01	2	7.4	2	5.7	1.0000
A*30:01	4	14.8	5	14.3	1.0000
A*31:01	2	7.4	3	8.6	1.0000
A*32:01	1	3.7	1	2.9	1.0000
A*33:03	7	25.9	1	2.9	0.0168*
B*08:01	1	3.7	4	11.4	0.3760
B*13:01	2	7.4	2	5.7	1.0000
B*13:02	4	14.8	6	17.1	1.0000
B*15:01	1	3.7	1	2.9	1.0000
B*15:02	1	3.7	2	5.7	1.0000
B*15:11	2	7.4	0	0.0	0.1856
B*15:18	0	0.0	3	8.6	0.2504
B*15:25	1	3.7	0	0.0	0.4355
B*15:27	2	7.4	1	2.9	0.5752
B*18:01	1	3.7	1	2.9	1.0000
B*27:05	0	0.0	2	5.7	0.5003
B*35:01	7	25.9	7	20.0	0.7604
B*35:02	0	0.0	1	2.9	1.0000
B*35:03	0	0.0	2	5.7	0.5003
B*37:01	0	0.0	1	2.9	1.0000
B*39:01	1	3.7	1	2.9	1.0000
B*40:01	4	14.8	7	20.0	0.7422
B*40:02	3	11.1	4	11.4	1.0000
B*40:03	0	0.0	1	2.9	1.0000
B*44:03	3	11.1	1	2.9	0.3088
B*46:01	3	11.1	5	14.3	1.0000
B*48:01	4	14.8	7	20.0	0.7422
B*49:01	1	3.7	0	0.0	0.4355
B*51:01	3	11.1	5	14.3	1.0000
B*51:02	1	3.7	0	0.0	0.4355
B*52:01	3	11.1	1	2.9	0.3088
B*54:01	2	7.4	1	2.9	0.5752
B*58:01	3	11.1	1	2.9	0.3088
B*67:01	1	3.7	1	2.9	1.0000
C*01:02	4	14.8	7	20.0	0.7422
C*01:03	1	3.7	0	0.0	0.4355
C*02:02	0	0.0	2	5.7	0.5003
C*03:02	3	11.1	2	5.7	0.6450
C*03:03	7	25.9	7	20.0	0.7604
C*03:04	3	11.1	8	22.9	0.3209
C*04:01	5	18.5	5	14.3	0.7351
C*04:03	1	3.7	0	0.0	0.4355
C*06:02	4	14.8	8	22.9	0.5263
C*07:01	2	7.4	0	0.0	0.1856
C*07:02	7	25.9	8	22.9	1.0000
C*07:04	1	3.7	1	2.9	1.0000
C*08:01	7	25.9	13	37.1	0.4182
C*08:03	1	3.7	1	2.9	1.0000
C*12:02	2	7.4	1	2.9	0.5752
C*12:03	0	0.0	2	5.7	0.5003
C*14:02	2	7.4	3	8.6	1.0000
C*14:03	1	3.7	0	0.0	0.4355
C*15:02	1	3.7	1	2.9	1.0000
DRB1*01:01	0	0.0	1	2.9	1.0000
DRB1*03:01	4	14.8	4	11.4	0.7192
DRB1*04:01	2	7.4	3	8.6	1.0000
DRB1*04:02	0	0.0	1	2.9	1.0000
DRB1*04:03	0	0.0	1	2.9	1.0000
DRB1*04:04	0	0.0	2	5.7	0.5003
DRB1*04:05	5	18.5	8	22.9	0.7604
DRB1*04:06	0	0.0	1	2.9	1.0000
DRB1*04:10	0	0.0	1	2.9	1.0000
DRB1*07:01	5	18.5	5	14.3	0.7351
DRB1*08:01	1	3.7	0	0.0	0.4355
DRB1*08:03	2	7.4	5	14.3	0.4550
DRB1*09:01	8	29.6	10	28.6	1.0000
DRB1*10:01	0	0.0	1	2.9	1.0000
DRB1*11:01	2	7.4	1	2.9	0.5752
DRB1*12:01	1	3.7	3	8.6	0.6256
DRB1*12:02	3	11.1	5	14.3	1.0000
DRB1*13:02	1	3.7	0	0.0	0.4355
DRB1*13:03	1	3.7	0	0.0	0.4355
DRB1*14:01	0	0.0	2	5.7	0.5003
DRB1*14:03	1	3.7	1	2.9	1.0000
DRB1*14:04	1	3.7	0	0.0	0.4355
DRB1*14:05	1	3.7	1	2.9	1.0000
DRB1*14:07	1	3.7	0	0.0	0.4355
DRB1*14:54	0	0.0	1	2.9	1.0000
DRB1*15:01	5	18.5	4	11.4	0.4851
DRB1*15:02	3	11.1	1	2.9	0.3088
DRB1*16:02	4	14.8	3	8.6	0.6886
DQB1*02:01	4	14.8	5	14.3	1.0000
DQB1*02:02	4	14.8	5	14.3	1.0000
DQB1*03:01	8	29.6	9	25.7	0.7796
DQB1*03:02	0	0.0	8	22.9	0.0076*
DQB1*03:03	9	33.3	11	31.4	1.0000
DQB1*04:01	4	14.8	6	17.1	1.0000
DQB1*04:02	1	3.7	1	2.9	1.0000
DQB1*05:01	1	3.7	2	5.7	1.0000
DQB1*05:02	5	18.5	6	17.1	1.0000
DQB1*05:03	2	7.4	1	2.9	0.5752
DQB1*06:01	5	18.5	8	22.9	0.7604
DQB1*06:02	5	18.5	3	8.6	0.2789
DQB1*06:04	1	3.7	0	0.0	0.4355
DQB1*07:01	0	0.0	1	2.9	1.0000
DQB1*16:02	0	0.0	1	2.9	1.0000

*, P<0.05.

Table S2 Human leucocyte antigen (HLA)-A, B, C, DRB1, and DQB1 allele carrier frequency between the compensated and decompensated liver disease in patients with anti-soluble liver antigen-/liver pancreas-positive autoimmune hepatitis

Allele	Compensated (n=45)		Decompensated (n=17)		P value
	n	%	n	%	
A*01:01	2	4.4	2	11.8	0.3005
A*02:01	17	37.8	2	11.8	0.0652
A*02:03	2	4.4	1	5.9	1.0000
A*02:05	1	2.2	0	0.0	1.0000
A*02:06	7	15.6	0	0.0	0.1746
A*02:07	3	6.7	3	17.6	0.3325
A*02:10	1	2.2	0	0.0	1.0000
A*03:01	1	2.2	1	5.9	0.4765
A*03:02	1	2.2	0	0.0	1.0000
A*11:01	13	28.9	5	29.4	1.0000
A*11:02	1	2.2	0	0.0	1.0000
A*24:02	11	24.4	9	52.9	0.0651
A*24:03	2	4.4	0	0.0	1.0000
A*24:07	1	2.2	0	0.0	1.0000
A*25:01	0	0.0	1	5.9	0.2742
A*26:01	2	4.4	2	11.8	0.3005
A*30:01	7	15.6	2	11.8	1.0000
A*31:01	3	6.7	2	11.8	0.6086
A*32:01	2	4.4	0	0.0	1.0000
A*33:03	6	13.3	2	11.8	1.0000
B*08:01	4	8.9	1	5.9	1.0000
B*13:01	2	4.4	2	11.8	0.3005
B*13:02	8	17.8	2	11.8	0.7130
B*15:01	0	0.0	2	11.8	0.0719
B*15:02	2	4.4	1	5.9	1.0000
B*15:11	2	4.4	0	0.0	1.0000
B*15:18	0	0.0	3	17.6	0.0180*
B*15:25	1	2.2	0	0.0	1.0000
B*15:27	3	6.7	0	0.0	0.5550
B*18:01	1	2.2	1	5.9	0.4765
B*27:05	1	2.2	1	5.9	0.4765
B*35:01	13	28.9	1	5.9	0.0867
B*35:02	0	0.0	1	5.9	0.2742
B*35:03	2	4.4	0	0.0	1.0000
B*37:01	1	2.2	0	0.0	1.0000
B*39:01	2	4.4	0	0.0	1.0000
B*40:01	7	15.6	4	23.5	0.4745
B*40:02	5	11.1	2	11.8	1.0000
B*40:03	1	2.2	0	0.0	1.0000
B*44:03	3	6.7	1	5.9	1.0000
B*46:01	4	8.9	4	23.5	0.1985
B*48:01	8	17.8	3	17.6	1.0000
B*49:01	1	2.2	0	0.0	1.0000
B*51:01	7	15.6	1	5.9	0.4267
B*51:02	0	0.0	1	5.9	0.2742
B*52:01	3	6.7	1	5.9	1.0000
B*54:01	2	4.4	1	5.9	1.0000
B*58:01	4	8.9	0	0.0	0.5676
B*67:01	1	2.2	1	5.9	0.4765
C*01:02	6	13.3	5	29.4	0.1553
C*01:03	1	2.2	0	0.0	1.0000
C*02:02	1	2.2	1	5.9	0.4765
C*03:02	5	11.1	0	0.0	0.3103
C*03:03	12	26.7	2	11.8	0.3130
C*03:04	6	13.3	5	29.4	0.1553
C*04:01	9	20.0	1	5.9	0.2601
C*04:03	1	2.2	0	0.0	1.0000
C*06:02	10	22.2	2	11.8	0.4836
C*07:01	2	4.4	0	0.0	1.0000
C*07:02	11	24.4	4	23.5	1.0000
C*07:04	1	2.2	1	5.9	0.4765
C*08:01	13	28.9	7	41.2	0.3767
C*08:03	2	4.4	0	0.0	1.0000
C*12:02	2	4.4	1	5.9	1.0000
C*12:03	1	2.2	1	5.9	0.4765
C*14:02	4	8.9	1	5.9	1.0000
C*14:03	0	0.0	1	5.9	0.2742
C*15:02	1	2.2	1	5.9	0.4765
DRB1*01:01	1	2.2	0	0.0	1.0000
DRB1*03:01	7	15.6	1	5.9	0.4267
DRB1*04:01	3	6.7	2	11.8	0.6086
DRB1*04:02	1	2.2	0	0.0	1.0000
DRB1*04:03	1	2.2	0	0.0	1.0000
DRB1*04:04	1	2.2	1	5.9	0.4765
DRB1*04:05	4	8.9	9	52.9	0.0005*
DRB1*04:06	1	2.2	0	0.0	1.0000
DRB1*04:10	1	2.2	0	0.0	1.0000
DRB1*07:01	10	22.2	1	5.9	0.2620
DRB1*08:01	1	2.2	0	0.0	1.0000
DRB1*08:03	5	11.1	2	11.8	1.0000
DRB1*09:01	13	28.9	5	29.4	1.0000
DRB1*10:01	1	2.2	0	0.0	1.0000
DRB1*11:01	2	4.4	1	5.9	1.0000
DRB1*12:01	4	8.9	0	0.0	0.5676
DRB1*12:02	5	11.1	3	17.6	0.6724
DRB1*13:02	0	0.0	1	5.9	0.2742
DRB1*13:03	1	2.2	0	0.0	1.0000
DRB1*14:01	2	4.4	0	0.0	1.0000
DRB1*14:03	1	2.2	1	5.9	0.4765
DRB1*14:04	1	2.2	0	0.0	1.0000
DRB1*14:05	1	2.2	1	5.9	0.4765
DRB1*14:07	0	0.0	1	5.9	0.2742
DRB1*14:54	1	2.2	0	0.0	1.0000
DRB1*15:01	8	17.8	1	5.9	0.4228
DRB1*15:02	4	8.9	0	0.0	0.5676
DRB1*16:02	6	13.3	2	11.8	1.0000
DQB1*02:01	8	17.8	1	5.9	0.4228
DQB1*02:02	8	17.8	1	5.9	0.4228
DQB1*03:01	12	26.7	5	29.4	1.0000
DQB1*03:02	4	8.9	4	23.5	0.1985
DQB1*03:03	15	33.3	7	41.2	0.5679
DQB1*04:01	4	8.9	6	35.3	0.0200*
DQB1*04:02	1	2.2	1	5.9	0.4765
DQB1*05:01	3	6.7	0	0.0	0.5550
DQB1*05:02	8	17.8	3	17.6	1.0000
DQB1*05:03	2	4.4	1	5.9	1.0000
DQB1*06:01	10	22.2	3	17.6	1.0000
DQB1*06:02	8	17.8	0	0.0	0.0936
DQB1*06:04	0	0.0	1	5.9	0.2742

*, P<0.05.

Table S3 Human leucocyte antigen (HLA)-A-C, DRB1, and DQB1 allele carrier frequency between patients with and without other autoimmune diseases in anti-soluble liver antigen-/liver pancreas-positive autoimmune hepatitis patients

Allele	With autoimmune diseases (n=16)		Without autoimmune diseases (n=46)		P value
	n	%	n	%	
A*01:01	0	0	4	8.7	0.5650
A*02:01	5	31.3	14	30.4	1.0000
A*02:03	0	0	3	6.5	0.5620
A*02:05	0	0	1	2.2	1.0000
A*02:06	0	0	7	15.2	0.1750
A*02:07	3	18.8	3	6.5	0.1720
A*02:10	0	0	1	2.2	1.0000
A*03:01	1	6.3	1	2.2	0.4530
A*03:02	0	0	1	2.2	1.0000
A*11:01	5	31.3	13	28.3	1.0000
A*11:02	0	0	1	2.2	1.0000
A*24:02	6	37.5	14	30.4	0.7570
A*24:03	0	0	2	4.3	1.0000
A*24:07	0	0	1	2.2	1.0000
A*25:01	0	0	1	2.2	1.0000
A*26:01	2	12.5	2	4.3	0.2720
A*30:01	3	18.8	6	13	0.6830
A*31:01	0	0	5	10.9	0.3150
A*32:01	1	6.3	1	2.2	0.4530
A*33:03	3	18.8	5	10.9	0.4140
B*08:01	2	12.5	3	6.5	0.5970
B*13:01	3	18.8	1	2.2	0.0490*
B*13:02	3	18.8	7	15.2	0.7090
B*15:01	1	6.3	1	2.2	0.4530
B*15:02	1	6.3	2	4.3	1.0000
B*15:11	0	0	2	4.3	1.0000
B*15:18	2	12.5	1	2.2	0.1610
B*15:25	0	0	1	2.2	1.0000
B*15:27	0	0	3	6.5	0.5620
B*18:01	0	0	2	4.3	1.0000
B*27:05	0	0	2	4.3	1.0000
B*35:01	3	18.8	11	23.9	1.0000
B*35:02	1	6.3	0	0	0.2580
B*35:03	0	0	2	4.3	1.0000
B*37:01	0	0	1	2.2	1.0000
B*39:01	0	0	2	4.3	1.0000
B*40:01	1	6.3	10	21.7	0.2610
B*40:02	2	12.5	5	10.9	1.0000
B*40:03	1	6.3	0	0	0.2580
B*44:03	1	6.3	3	6.5	1.0000
B*46:01	4	25	4	8.7	0.1870
B*48:01	2	12.5	9	19.6	0.7130
B*49:01	0	0	1	2.2	1.0000
B*51:01	2	12.5	6	13	1.0000
B*51:02	0	0	1	2.2	1.0000
B*52:01	2	12.5	2	4.3	0.2720
B*54:01	0	0	3	6.5	0.5620
B*58:01	0	0	4	8.7	0.5650
B*67:01	0	0	2	4.3	1.0000
C*01:02	4	25	7	15.2	0.4520
C*01:03	0	0	1	2.2	1.0000
C*02:02	0	0	2	4.3	1.0000
C*03:02	0	0	5	10.9	0.3150
C*03:03	3	18.8	11	23.9	1.0000
C*03:04	5	31.3	6	13	0.1320
C*04:01	3	18.8	7	15.2	0.7090
C*04:03	0	0	1	2.2	1.0000
C*06:02	3	18.8	9	19.6	1.0000
C*07:01	0	0	2	4.3	1.0000
C*07:02	3	18.8	12	26.1	0.7390
C*07:04	0	0	2	4.3	1.0000
C*08:01	6	37.5	14	30.4	0.7570
C*08:03	1	6.3	1	2.2	0.4530
C*12:02	2	12.5	1	2.2	0.1610
C*12:03	0	0	2	4.3	1.0000
C*14:02	2	12.5	3	6.5	0.5970
C*14:03	0	0	1	2.2	1.0000
C*15:02	0	0	2	4.3	1.0000
DRB1*01:01	1	6.3	0	0	0.2580
DRB1*03:01	2	12.5	6	13	1.0000
DRB1*04:01	1	6.3	4	8.7	1.0000
DRB1*04:02	0	0	1	2.2	1.0000
DRB1*04:03	1	6.3	0	0	0.2580
DRB1*04:04	0	0	2	4.3	1.0000
DRB1*04:05	7	43.8	6	13	0.0280*
DRB1*04:06	0	0	1	2.2	1.0000
DRB1*04:10	0	0	1	2.2	1.0000
DRB1*07:01	2	12.5	9	19.6	0.7130
DRB1*08:01	0	0	1	2.2	1.0000
DRB1*08:03	3	18.8	4	8.7	0.3610
DRB1*09:01	3	18.8	15	32.6	0.3550
DRB1*10:01	0	0	1	2.2	1.0000
DRB1*11:01	1	6.3	2	4.3	1.0000
DRB1*12:01	2	12.5	2	4.3	0.2720
DRB1*12:02	2	12.5	6	13	1.0000
DRB1*13:02	0	0	1	2.2	1.0000
DRB1*13:03	0	0	1	2.2	1.0000
DRB1*14:01	0	0	2	4.3	1.0000
DRB1*14:03	0	0	2	4.3	1.0000
DRB1*14:04	0	0	1	2.2	1.0000
DRB1*14:05	0	0	2	4.3	1.0000
DRB1*14:07	0	0	1	2.2	1.0000
DRB1*14:54	0	0	1	2.2	1.0000
DRB1*15:01	1	6.3	8	17.4	0.4250
DRB1*15:02	1	6.3	3	6.5	1.0000
DRB1*16:02	3	18.8	5	10.9	0.4140
DQB1*02:01	2	12.5	7	15.2	1.0000
DQB1*02:02	2	12.5	7	15.2	1.0000
DQB1*03:01	5	31.3	12	26.1	0.7500
DQB1*03:02	1	6.3	7	15.2	0.6680
DQB1*03:03	3	18.8	17	37	0.2260
DQB1*04:01	6	37.5	4	8.7	0.0140*
DQB1*04:02	0	0	2	4.3	1.0000
DQB1*05:01	1	6.3	2	4.3	1.0000
DQB1*05:02	3	18.8	8	17.4	1.0000
DQB1*05:03	0	0	3	6.5	0.5620
DQB1*06:01	5	31.3	8	17.4	0.2910
DQB1*06:02	0	0	8	17.4	0.0990
DQB1*06:04	0	0	1	2.2	1.0000

*, P<0.05.