INTERPRETATION TABLE

HLA-A*02 high resolution SSP typing

Amplification patterns of the HLA-A*02:01 to *02:403 alleles

Wells 1–24:

	Well[19]																							
										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
Length of spec.	360	240	175	80	125	75	175	415	105	115	225	195	145	95	125	110	205	175	125	135	220	160	135	75
PCR product(s)								505			350	235		170	265	155	360		165	295	255		180	115
															305									160
Length of int. pos. control[1]	800	1070	1070	1070	1070	800	1070	1070	1070	800	1070	1070	800	800	800	800	1070	1070	1070	1070	1070	1070	800	1070
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
***02:01:01:0**1, 02:01:01:03-**02:01:02**, **02:01:04**-02:01:15, **02:01:18**-02:01:19, 02:01:21-**02:01:51,** 02:01:53-02:01:62, 02:01:64-02:01:73, 02:01:75-02:01:81, **02:01:84**-02:01:86, 02:201, 02:204, 02:208, 02:210, 02:212, 02:216-02:218, 02:220, 02:231, 02:234, 02:236, 02:238-02:241, 02:249, 02:252, 02:256-02:257, 02:262, 02:266, 02:270, 02:272-02:273, 02:276-02:277, 02:285, 02:287-02:288, 02:292, 02:294, 02:296, 02:302, 02:306-02:307, 02:311-02:313, 02:316, 02:318, 02:326-02:327, 02:329, 02:332, 02:336, 02:340-02:343, 02:346, 02:348-02:349, 02:352-02:354, 02:357, 02:360, 02:362-02:363, 02:365, 02:368, 02:374-02:375, 02:377, 02:379-02:381, 02:383-02:386, 02:388-02:392, 02:396-02:397, 02:401	+	+	+	+	+																			
***02:01:01:02L**	+	+	+	+	+																			
***02:01:03**, 02:243, 02:394	+		+	+	+																			
*02:01:17, **02:01:52,** 02:01:63, 02:01:74, 02:372, 02:378	+	+	+		+																			
*02:01:83, **02:30**, 02:399	+	+	+	+	+																			
***02:02,** 02:209, 02:320	+	+	+			+	+	+																
***02:03:01**, **02:03:03**-02:03:04, 02:253, 02:258, 02:264, 02:281, 02:345, 02:370	+	+	+	+		+			+	+														
*02:03:02	+	+	+	+		+			w	w														
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

Wells 25–48:

	Well[19]																							
	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Length of spec.	125	125	95	235	220	130	95	205	230	120	110	85	140	125	170	90	185	225	180	125	105	70	165	115
PCR product(s)	145	165	145		300	160	220	230	325	165	155	445		225	260	210			225	155	185	205	205	
	165	260						255		180					300					205			255	
																							305	
Length of int. pos. control[1]	1070	800	1070	800	1070	800	800	1070	1070	800	1070	1070	1070	800	1070	1070	1070	800	800	800	1070	1070	800	1070
Well No.	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
***02:01:01:0**1, 02:01:01:03-**02:01:02**, **02:01:04**-02:01:15, **02:01:18**-02:01:19, 02:01:21-**02:01:51,** 02:01:53-02:01:62, 02:01:64-02:01:73, 02:01:75-02:01:81, **02:01:84**-02:01:86, 02:201, 02:204, 02:208, 02:210, 02:212, 02:216-02:218, 02:220, 02:231, 02:234, 02:236, 02:238-02:241, 02:249, 02:252, 02:256-02:257, 02:262, 02:266, 02:270, 02:272-02:273, 02:276-02:277, 02:285, 02:287-02:288, 02:292, 02:294, 02:296, 02:302, 02:306-02:307, 02:311-02:313, 02:316, 02:318, 02:326-02:327, 02:329, 02:332, 02:336, 02:340-02:343, 02:346, 02:348-02:349, 02:352-02:354, 02:357, 02:360, 02:362-02:363, 02:365, 02:368, 02:374-02:375, 02:377, 02:379-02:381, 02:383-02:386, 02:388-02:392, 02:396-02:397, 02:401																								
***02:01:01:02L**																								
***02:01:03**, 02:243, 02:394																								
*02:01:17, **02:01:52,** 02:01:63, 02:01:74, 02:372, 02:378																								
*02:01:83, **02:30**, 02:399																								
***02:02,** 02:209, 02:320																	+							
***02:03:01**, **02:03:03**-02:03:04, 02:253, 02:258, 02:264, 02:281, 02:345, 02:370																			+					
*02:03:02																			+					
Well No.	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8

***02:04**	+	+		+	+						+																																					
***02:05:01**-02:05:06, 02:229, 02:232, 02:286, 02:324, 02:337, 02:359	+		+			+	+	+				+	+																												+							
***02:06:01-02:06:11**, 02:06:13, 02:248, 02:278, 02:290, 02:328, 02:333	+		+	+	+							+																																				
*02:06:12	+		+		+							+																																				
***02:07:01**-02:07:02, 02:219, 02:261, 02:265, 02:335		+	+	+	+									+																																		
***02:08**	+		+			+	+					+	+															+													+							
***02:09**	+	+	+	+	+											+																																
***02:10,** 02:244			+	+	+							+					+										+																					
***02:11:01,** 02:11:03-02:11:04, 02:297-02:298, 02:308			+	+	+													+																														
***02:11:02**			+	+	+																																											
***02:12**	+	+	+	+															+																													
***02:13**	+	+	+	+						+									+																													
***02:14**	+		+		+		+	+				+	+																												+							
*02:15N		+	+	+	+									+							+																											
*02:16	+	+	+	+	+																				+																							
***02:17:01**-02:17:02, 02:303		+		+	+						+						+						+																		+							
*02:18		+	+	+	+									+																									+									
*02:19	+	+		+															+			+											+												+			
***02:20:01**-02:20:02	+	+	+	+	+																							+																				
*02:21	+		+	+	+							+			+																																	
***02:22:01**-02:22:02	+	+	+	+		+																																					+					
***02:24:01**-02:24:02	+	+	+	+																																+												
***02:25**	+	+	+	+	+				+																																							
*02:26	+	+	+	+	+					+																																						
***02:27**	+	+	+	+															+					+																								
***02:28**	+		+	+	+							+															+																					
***02:29**	+	+	+	+	+													+																														
*02:31	+	+	+	+	+																		+																									
*02:32N	+	+	+	+	+			+																																								
***02:33**		+	+	+	+																					+																						
*02:34	+	+	+	+	+																													+								+						
***02:35:01**			+	+	+																													+								+					+	
*02:35:02			+		+																													+								+					+	
*02:35:03			+	+	+																																					+					+	
***02:36**	+	+	+	+	+																	+											+															
*02:37	+	+	+	+															+			+											+															
***02:38**	+	+	+	+					+	+									+																		+											
***02:39**		+		+	+												+																												+			
***02:40:01**-02:40:02	+	+	+	+	+																														+					+								
***02:41**	+		+	+	+							+																										+										
***02:42**	+	+	+	+	+																																											
*02:43N	+	+	+	+	+																									+																		
***02:44**	+			+								+							+																										+			
*02:45	+	+	+	w	+																								+		+																	
*02:46	+	+	+	+	+																								+			+																
*02:47		+	+			+	+	+																								+									+							
***02:48**			+		+																								+			+															+	
***02:49**	+	+	+	+		+										+				+																							+					
*02:50	+	+	+			+										+											+																					
***02:51**	+		+	+	+							+																							+					+								
*02:52	+	+	+	+	+																					+	+																					
***02:53N**	+	+	+	+	+																																											
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
***02:54**	+		+	+								+							+			+											+															
***02:55**	+	+	+		+																							+																				

*02:56:01	+	+	+	w	+																							+	w		+			+								+						
*02:56:02	+	+	+		+																							+	w		+			+								+						
*02:57	+			+	+						+	+																													+							
***02:58**	+	+	+	+	+																																				+							
*02:59, **02:203**	+	+	+	+	+																																							+				
***02:60:01**-02:60:02, 02:254	+	+	+	+	+																																								+			
***02:61**	+		+	+	+							+																																		+		
*02:62	+	+	+	+	+																							+						+								+						
*02:63	+	+	+			+	+	+																																	+						+	
***02:64**	+	+	+	+	+																																											+
*02:65	+	+		+							+																									+												
*02:66	+	+	+	+	+																																									+		
*02:67	+	+	+	+	+																																			+								
*02:68	+	+	+	+	w																																+											
*02:69			+	+	+													+																														
*02:70	+	+	+	+	+																											+																
*02:71	+	+	+	+	+																																						+					
*02:72	+		+	+	+							+																																				
*02:73	+	+	+	+	+											+											+																					
*02:74:01-02:74:02	+	+	+	+	+																																											
*02:75	+	+	+	+	+																																				+							
***02:76:01**-02:76:02	+		+	+	+																																											
***02:77**	+	+	+	+	+																														+													
*02:78			+	w	+																							+	w		+			+													+	
*02:79:01-02:79:02	+			+	+							+																																	+			
***02:80**	+	+	+	+	+																																	+										
*02:81			+	+	+																																											
***02:82N**	+	+	+	+	+																										+																	
*02:83N	+	+	+	+	+												+																															
***02:84**	+		+	+	+							+	+																																			
***02:85**	+	+	+	+	+							+																																				
***02:86**	+	+		+	+																																								+			
***02:87**			+	+	+										+																																	
*02:88N	+	+	+	+	+																													+														
*02:89	+	+	+	+	+						+																																					
***02:90**, 02:331			+	+	+																																										+	
*02:91	+		+	+	+							+		+																																		
*02:92	+	+	+	+	+																								+																			
***02:93**	+	+	+	+	+											+											+																					
*02:94N	+	+	+	+	+																															+												
*02:95	+	+	+	+	+																						+																					
***02:96**	+	+	+	+	+										+																																	
*02:97:01-02:97:02, 02:305N[4]	+	+	+	+	+																																											
*02:99	+		+	+	+					+		+																																				
*02:101:01-**02:101:02**	+	+	+	+	+																																+											
***02:102**	+	+	+	+		+	+	+																																	+							
*02:103		+	+		+									+														+	w		+			+								+						
*02:104	+	+	+	+		+																								+													+					
***02:105**	+	+	+	+	+																																											
*02:106	+		+	+	+							+																																				
*02:107, **02:202**, **02:251**[5]	+	+	+	+	+																																											
*02:108				+	+						+	+					+						+																		+							
*02:109	+	+	+	+	+																																											
***02:110**		+		+	+						+						+						+				+														+							
*02:111, 02:350N[6]	+	+	+	+	+																																											
*02:112			+	+	+									+	+																																	
***02:113N**	+	+	+	+	+																																											
***02:114**	+	+	+	+	+																						+																					
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*02:115	+	+	+			+	+	+																																	+							
*02:116	+	+	+	+	+																																											
*02:117	+	+	+	+		+			+	+																	+											+					+					

***02:118**	+	+	+	+	+																																											
***02:119**, **02:263**[7]	+	+	+	+	+																																											
*02:120, 02:223N[8]	+	+	+	+	+																																											
***02:121**	+	+	+	+	+																																											
***02:122**	+		+			+						+				+											+																					
***02:123**	+	+	+	+	+																																											
*02:124			+	+	+																																											
***02:125N**	+	+	+	+	+																																											
*02:126	+		+	+	+							+																																				
*02:127	+		+	+	+							+																																				
***02:128**			+	+	+													+										+																				
***02:129**			+		+										+														+			+																
*02:130		+	+	+	+									+																					+					+								
***02:131**	+	+	+	+	+																				+																							
*02:132, **02:215**, **02:237**[9]	+	+	+	+	+																																											
***02:133**	+	+	+	+	+																																											
*02:134, 02:314N[10]	+	+	+	+	+																																											
*02:135	+	+		+																																+												
***02:136**			+	+		+									+																												+					
*02:137	+		+	+								+																								+												
*02:138, 02:284N[11]	+	+	+	+	+																																											
***02:139**, **02:235**[12]	+	+	+	+	+																																											
*02:140	+	+	+	+	+																																											
***02:141**, **02:275**[13]	+	+	+	+	+																																											
*02:142	+		+	+								+							+																													
*02:143	+		+	+	+							+																																				
*02:144	+		+		+							+																																			+	
*02:145, **02:221**	+	+	+	+	+																																											
***02:146**			+	+	+																																											
***02:147**	+	+	+	+	+																																											
*02:148		+	+	+		+			+	+							+																										+					
***02:149**	+	+		+	+																																											
*02:150, **02:197**, **02:325**[14]	+	+	+	+	+																																											
***02:151**	+	+	+	+	+																																											
*02:152	+	+		+							+																									+												
***02:153**, 02:196[15]	+	+	+	+	+																																											
***02:154**	+		+			+	+	+				+	+																								+				+							
*02:155	+	+	+			+	+	+																			+														+							
*02:156	+	+		+	+											+											+																					
*02:157	+	+	+	+	+																																											
***02:158**	+	+	+	+	+																																											
*02:159, 02:293Q, 02:364	+	+	+	+	+																																		+									
***02:160**	+	+	+	+	+																																											
***02:161**	+	+	+	+	+																		+																									
*02:162	+	+	+	+	+																																											
***02:163**	+	+	+	+	+																									+																		
***02:164**	+	+	+	+	+																																											
***02:165**	+	+	+	+	+																												+															
***02:166**	+	+	+	+	+																																											
*02:167, **02:299**	+	+	+	+	+																																											
*02:168	+	+	+	+	+																												+															
***02:169**	+		+		+							+																+	w		+																	
*02:170	+		+	+	+							+																											+									
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*02:171:01-02:171:02	+	+	+	+	+				+	+																																						
***02:172**	+		+			+	+	+				+	+			+																									+							
***02:173**	+	+	+	+	+																																											
*02:174, **02:228**	+	+	+	+	+																																											
*02:175	+	+	+	+	+																																											
*02:176	+	+	+		+																											+																
***02:177**	+	+	+	+	+																																											+
*02:178	+		+	+	+							+																																				+

Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*02:179	+		+			+	+	+				+	+																												+							
***02:180,** 02:358[16]	+		+	+	+							+																	+																			
*02:181	+	+	+	+	+																																											
***02:182**	+	+	+	+																																												
***02:183**	+	+	+	+	+																																											
*02:184	+	+	+	+	+																																											
*02:185	+	+	+		+																						+																					
***02:186**	+	+	+			+	+	+							+																										+							
*02:187	+	+	+	+	+																																											
***02:188**	+	+	+	+	+																																											
***02:189**	+	+	+	+	+																																											
***02:190**	+	+		+	+																																											
*02:191		+	+	+		+								+																													+					
*02:192	+	+	+	+	+																																											
*02:193, **02:213[17]**	+	+	+	+	+																																											
***02:194**	+	+		+	+																																											
*02:195	+	+	+		+																							+	w		+																	
***02:198**	+	+	+	+	+																					+																						
***02:199**	+	+	+	+	+																																											
***02:200**	+	+	+	+	+															+																												
***02:205**	+	+	+		+																																										+	
***02:206**	+	+	+		+																																											
***02:207**	+	+	+	+	+																																										+	
***02:211:01**	+	+	+	+	+																																											
*02:211:02		+	+	+	+																																											
***02:214**	+	+	+	+	+																																											
*02:222N	+	+	+	+																																								+				
*02:224, 02:371	+	+		+	+																																											
*02:225N	+	+	+	+	+																																											
*02:226N	+	+	+	+																					+																							
***02:227N**	+	+	+	+	+																																											
***02:230**	+	+	+	+		+			+	+														+																			+					
***02:233**	+	+	+	+	+																			+																								
***02:242**		+	+	+	+												+										+																					
***02:245**	+	+	+	+	+																																											
*02:246	+	+	+	+	+																																											
*02:247			+	+	+																																											
*02:250N		+	+	+	+																																											
*02:255		+	+	+	+									+								+											+															
***02:259**	+		+	+	+							+																																				
***02:260**	+	+	+	+	+																																											
***02:267**	+	+	+	+		+			+																																		+					
*02:268		+		+	+						+						+						+																									
***02:269, 02:367[18]**	+	+	+	+	+																																											
*02:271	+		+					+				+	+						+																						+							
*02:274	+	+	+	+																																												
*02:279	+	+	+	+	+											+											+																					
*02:280	+	+	+	+					+	+									+																													
*02:282		+	+	+	+									+													+																					
***02:283**	+	+	+	+	+														+						+																							
***02:289**	+	+	+	+	+																																	+										
***02:291**	+	+	+	+	+																+																											
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*02:295	+		+	+	+							+																																				
*02:300				+	+						+	+					+						+				+														+							
*02:301N	+	+	+	+	+																																											
*02:304	+	+	+	+	+																						+											+										
*02:309	+	+		+																																+												
*02:310	+		+	+	+							+																																				
***02:315**	+	+	+			+			+	+																																	+					
*02:317, 02:347, 02:361		+	+	+	+																																											
*02:319			+	+	+									+																																		
*02:321N	+	+	+		+																																											
*02:322	+	+	+	+	+									+																																		
***02:323**	+	+	+	+		+				+																																	+					

***02:330**	+		+	+	+							+																																				
*02:334	+	+		+	+						+																																					
***02:338**	+	+		+	+																																											
*02:339	+	+	+	+	+																						+																					
***02:344**	+		+			+	+	+				+	+																												+							
***02:351**		+	+	+	+																																	+										
*02:355	+		+	+		+			+	+		+																															+					
*02:356N	+	+	+	+	+																+																											
*02:366N	+		+	+	+																																											
*02:369		+	+	+	+									+															+																			
*02:373N	+		+			+	+	+				+	+																												+							
*02:376	+		+			+	+	+				+	+																												+							
*02:382	+		+			+						+	+																														+					
*02:387	+		+	+	+							+											+																									
*02:395N	+	+	+	+	+													+																+														
*02:398			+	+	+							+					+																															
*02:400	+	+		+	+																												+												+			
*02:402	+	+	+	+						+																																	+					
*02:403		+	+	+										+																																		
*01:13, 01:17, 03:01:01:01-03:01:02, 03:01:04-03:07, 03:10-03:11N, 03:13-03:16, 03:17:02-03:22:02, 03:23:02-03:31, 03:33-03:35, 03:37-03:40, 03:42-03:43, 03:45-03:50, 03:52-03:58, 03:60-03:71, 03:73-03:74, 03:76-03:87, 03:90-03:94, 03:96-03:106, 03:109-03:122, 03:124-03:141, 03:143-03:151, 03:153-03:162N, 34:08, 74:13																																										+						
*01:20, 01:66																																													+			
*01:44																																																
*01:69:02				w																																												
*01:83:02, 11:121, 26:07:02, 33:01:02, 33:08-33:09, 74:04				+																																												
*01:104	+																																			+												
*03:01:03				w																																						+						
*03:09	+	+																																		+						+						
*03:17:01					+					+																																+						
*03:23:01				+																																						+						
*03:44																																										+						
*03:51																																										+						
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*03:75																																										+						
*03:89	+	+		+																																+												
*03:95																																										+			+			
*03:108	+	+																																		+												
*03:123																											+															+						
*11:06, 11:18	+											+																								+												
*11:16, 11:35, 11:57, 11:73																											+																					
*11:119															+			+					+														+											

*23:01:01-23:01:11, 23:05-23:07N, 23:09, 23:11N, 23:13, 23:14:02-23:23, 23:25-23:30, 23:32-23:33, 23:35-23:40, 23:42, 23:44, 23:46, 23:48-23:51, 23:53-23:54, 23:56, 24:24					+																	+													+													
*23:02																						+													w													
*23:03:01-23:03:02, 29:07, 31:29																																																
*23:04, 23:43					+																														+													
*23:08N					+																	+									+				+													
*23:10					+																	+													+		w											
*23:12					+						+						+					+													+													
*23:14:01					+																	+													+													
*23:24, 24:13:01					+																	+																										
*23:31, 23:45, 23:55					+											+						+													+													
*23:34, 24:13:02					+																	+																										
*23:41					+																	+													+													
*23:47					+																	+													+													
*23:52					+																	+													+													
*24:02:01:01-24:02:15, 24:02:17-24:02:41, 24:02:43-24:02:64, 24:04-24:05, 24:07-24:09N, 24:11N, 24:17, 24:19-24:20, 24:25-24:27, 24:29, 24:31-24:32, 24:34-24:40N, 24:43-24:45N, 24:47-24:50, 24:52-24:53, 24:57-24:58, 24:60N-24:64, 24:66-24:70, 24:74, 24:76-24:86N, 24:88, 24:90N, 24:95-24:98, 24:100-24:106, 24:108-24:109, 24:111-24:124, 24:126-24:130, 24:132N, 24:134-24:137, 24:139-24:156, 24:159, 24:161-24:166, 24:168-24:176, 24:178-24:187, 24:189, 24:191-24:203, 24:205-24:206, 24:209, 24:212, 24:214-24:217, 24:220-24:226, 24:230, 33:19																			+			+																										
*24:02:16, 24:06, 24:54, 24:87, 24:107, 24:160, 24:213, 24:227																						+																										
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
*24:03:01-24:03:02, 24:33, 24:75																			+																													
*24:10:01-24:10:02																			+																		+											
*24:14, 24:93																			+			+																							+			
*24:15, 24:41, 24:51, 24:92																+			+			+																										
*24:18					+					+																																						
*24:23																			+			w																										
*24:28, 24:30, 24:42, 24:89											+						+		+			+																										
*24:46																			+			+															w											
*24:55																			+			+			+																							

*24:56, 24:177										+									+			+																										
*24:59, 24:190, 24:229																			+			+		+																								
*24:71																			+			+													+													
*24:72																			+			+																										
*24:73, 24:157																			+			+																										
*24:91																						+															+											
*24:94					+																		+																		+							
*24:99									+										+			+																										
*24:131, 24:218																			+			+					+																					
*24:133																						+																										
*24:138						+																	+				+														+							
*24:188					+																	+	+				+														+							
*24:207					+																																											
*24:210																			+					+													+											
*24:219																			+					+																								
*24:228					+																	+	+																		+							
*25:11, 26:36	+																																			+												
*26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78	+											+																								+												
*26:10									+	+						+																					+											
*26:22, 66:09																																											+					
*29:15																																																
*29:19, 32:08, 33:24	+										+																									+												
*29:22, 33:22																																								+								
*29:48				+							+																									+												
*30:01:01-30:01:07, 30:08, 30:11:01-30:11:02, 30:14L-30:15, 30:17-30:20, 30:23-30:24, 30:26, 30:30-30:31, 30:35-30:36, 30:38-30:43, 30:48-30:49, 30:53-30:54, 30:56, 30:58-30:60, 30:62-30:63, 30:65, *C*03:82*																																		+														
*30:13, 30:44, 30:46	+																										+									+												
*30:16	+																										+							+		+												
*30:22																																																
*30:37																																		+														
*30:52																																		+														
*30:55																																		+								+						
*30:61					+																																											
*31:48, 33:15																																																
*31:67-31:68, 33:32:01					+																														+													
*32:28					+											+																			+													
*32:46																																																
*32:48N																																																
Well No.									1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Well No.									1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2,3]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8

*68:01:01:01-68:01:10, 68:01:12-68:01:13, 68:01:15-68:01:18, 68:03:01-68:04, 68:07, 68:10-68:11N, 68:13:01-68:13:02, 68:16-68:17, 68:19, 68:21:01-68:22, 68:24, 68:29, 68:32, 68:35-68:39, 68:41, 68:43, 68:45-68:47, 68:52, 68:55-68:59N, 68:66, 68:68-68:70, 68:72-68:73, 68:75, 68:79, 68:84-68:85, 68:87-68:91, 68:93-68:95, 68:98-68:99					+																					+																					
*68:01:11					+																					+							+														
*68:01:14																										+																					
*68:02:01:01-68:02:05, 68:18N, 68:27-68:28, 68:31, 68:34, 68:40, 68:53, 68:60, 68:62, 68:64, 68:67, 68:74, 68:77-68:78, 68:80, 68:82, 68:86, 68:92, 68:97			+			+										+										+																					
*68:05, 68:20	+					+					+	+														+																					
*68:06						+																				+																					
*68:08:01-68:08:02					+																					+																					
*68:09																			+							+																					
*68:12						+																																									
*68:14						+																				+																					
*68:15	+		+			+						+				+										+																					
*68:23			+			+																				+																					
*68:25						+										+										+																					
*68:26																			+			+				+																					
*68:30				+		+																				+																					
*68:33, 68:96						+																				+																					
*68:42						+				+																+																					
*68:44						+										+										+																					
*68:48			+													+										+																					
*68:49N						+										+																															
*68:50																																															
*68:51			+			+										+										+								w													
*68:54			+			+				+						+										+																					
*68:61			+			+				+						+										+										+											
*68:63					+					+																+																					
*68:65						+																+				+																					
*68:71						+																				+															+						
*68:76						+																				+																					
*68:81			+			+										+										+																					
*68:83						+																				+																+					
*69:01			+		+																																										
*74:06	+	+									+																									+												
*80:01:01:01	w																																			w												
*B*15:67, B*35:110*																																																
*B*15:173, B*18:63*																																																
*B*44:59:02*																+																																
*B*44:136*																+																																
*B*51:136*					+					+						+																																
*C*07:204*					+											+								+																								
*C*12:37*										+						+																																
*C*12:94, C*14:48*																																									+							
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
HLA-A allele[2]	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8

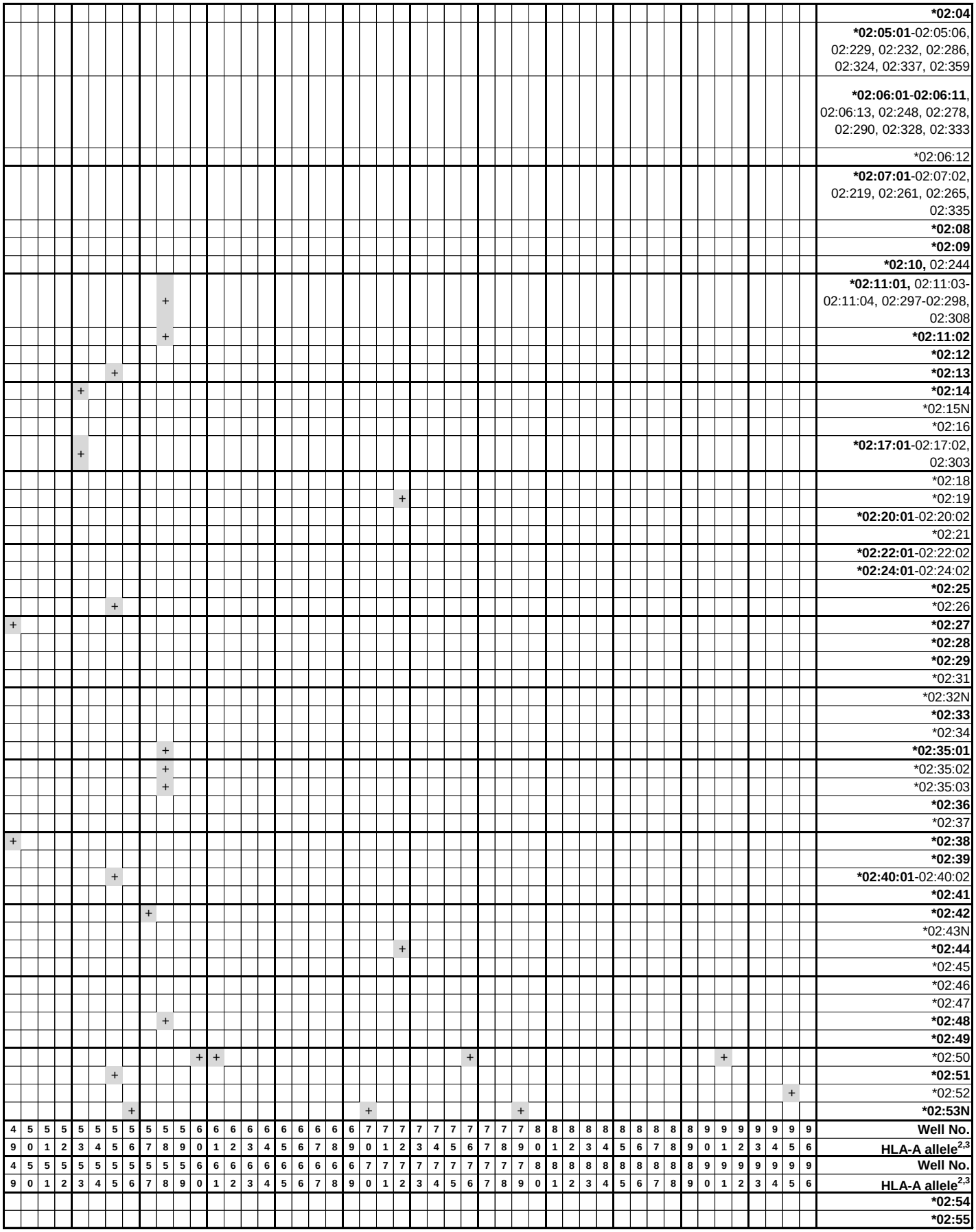
INTERPRETATION TABLE

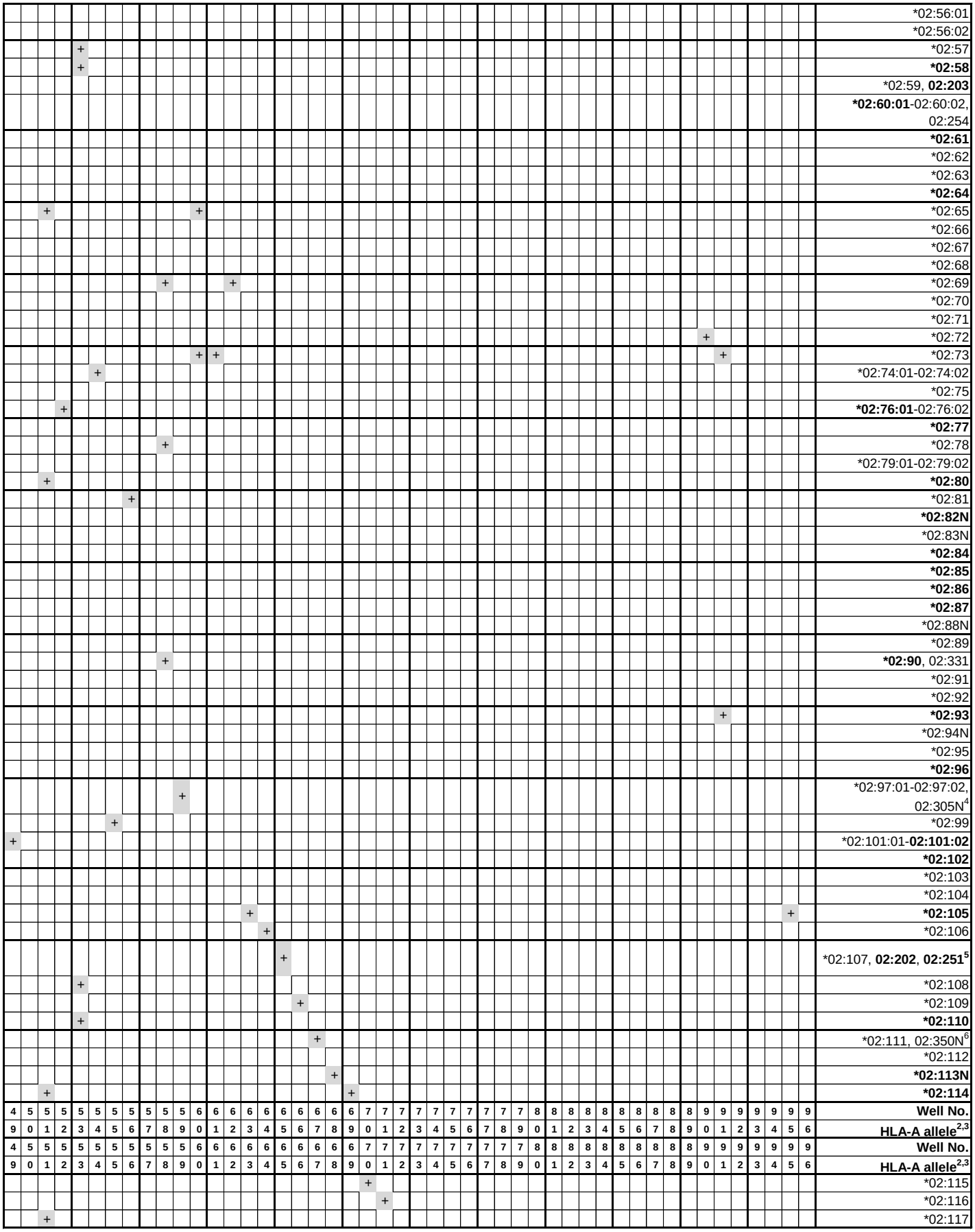
HLA-A*02 high resolution SSP typing

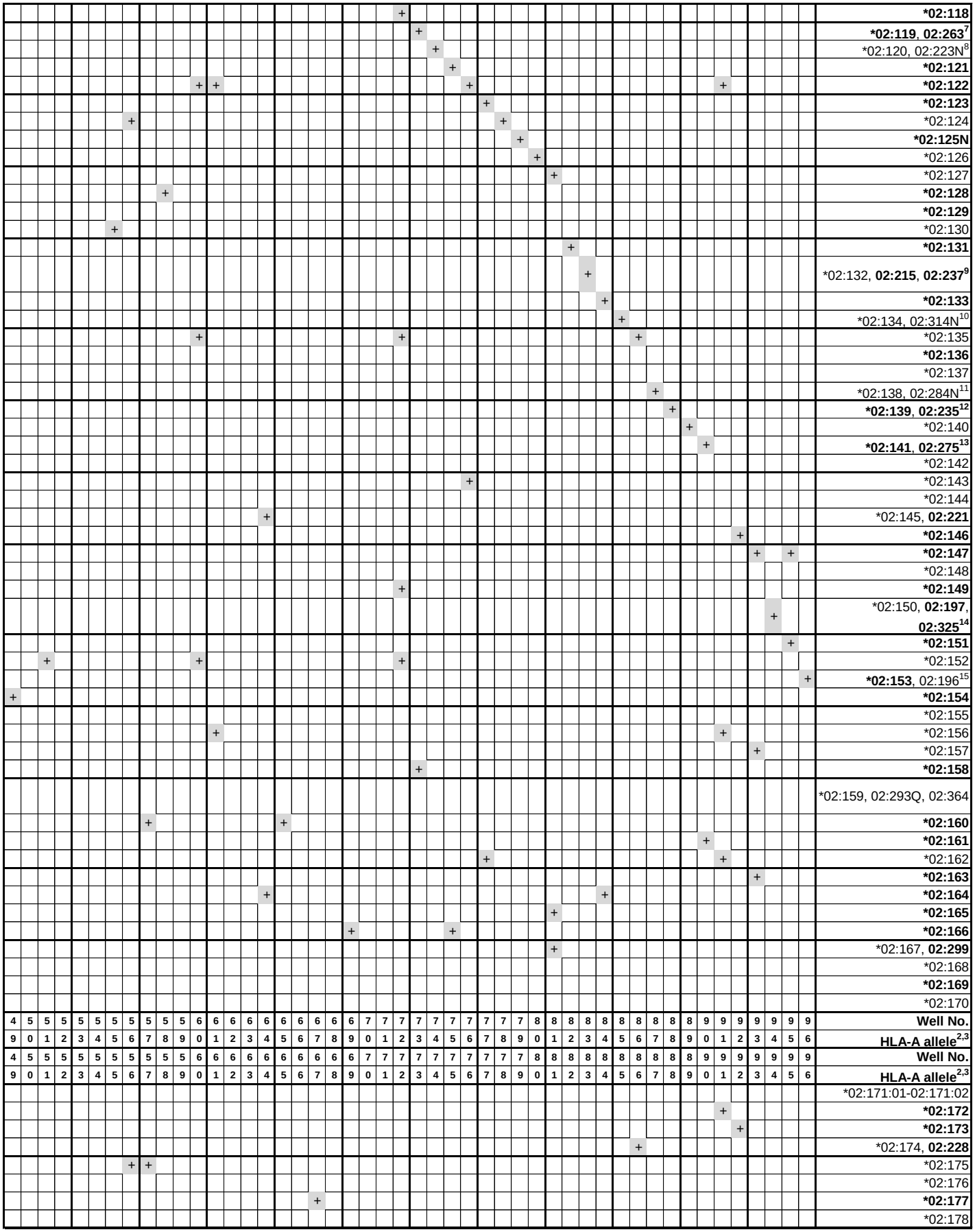
Amplification patterns of the HLA-A*02:01 to *02:403 alleles

Well[19]

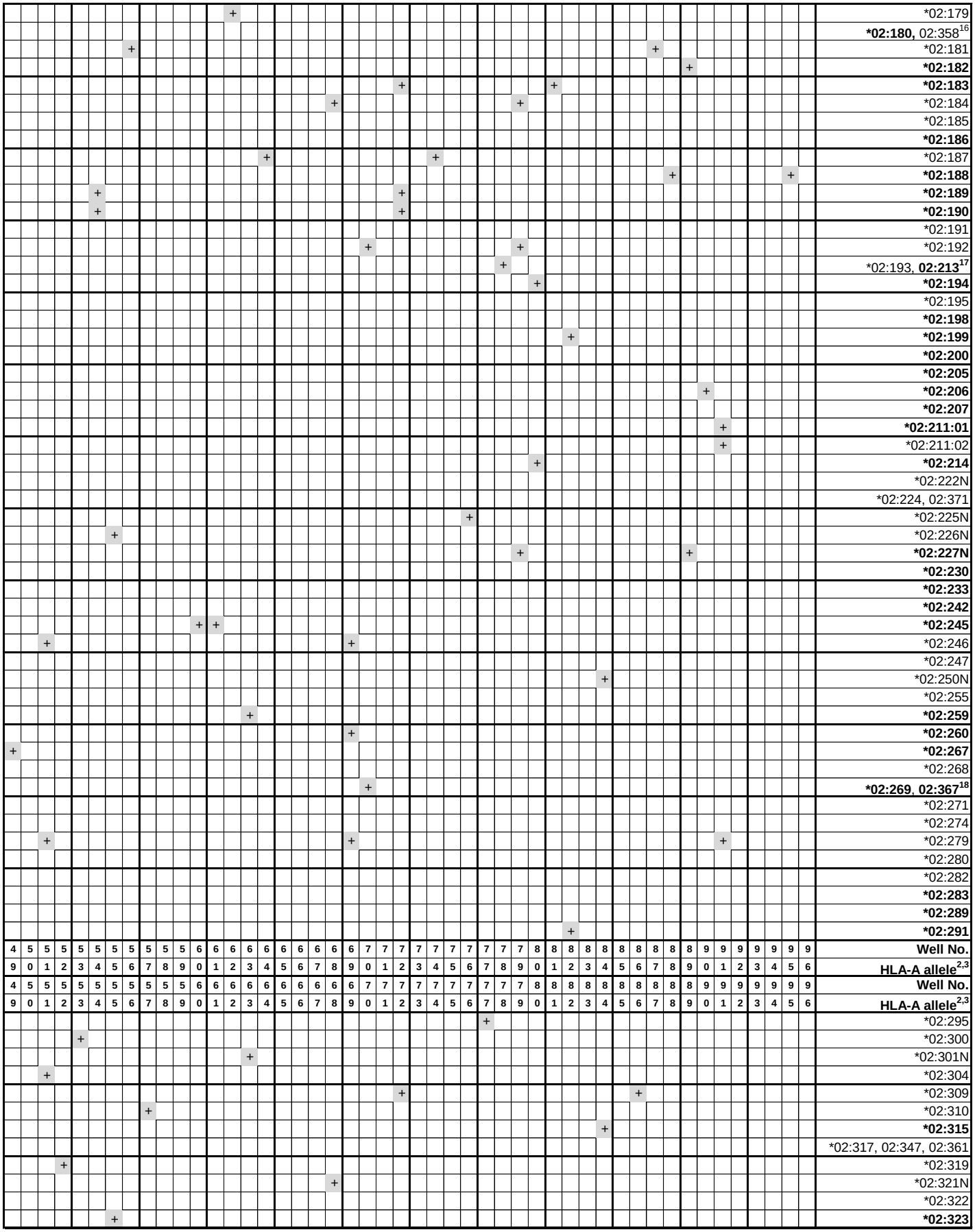
4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	
115	145	410	185	225	240	200	150	105	255	145	345	185	180	95	125	145	170	105	210	170	125	260	110	80	175	100	220	85	75	215	90	110	130	120	180	170	180	155	135	120	100	110	180	130	110	135	135	**Length of spec.**
145					350		275	145		190				160	175	185		130	260	225	180		230	200	250	165		110	130	270	135	235	255	240	205	260	255	210	240	200	130		260	250	210		255	**PCR product(s)**
															260	250		180		335	285		260	250		205			240		230	315	295		245		310				190			295	360			
																		300																														
1070	800	1070	800	1070	800	1070	1070	1070	800	800	1070	1070	800	800	1070	1070	800	800	1070	1070	800	800	1070	800	800	1070	800	800	1070	1070	1070	800	1070	800	800	800	800	800	800	800	800	800	1070	800	800	800	1070	**Length of int. pos. control[1]**
4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	**Well No.**
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	**HLA-A allele[2,3]**
																																																***02:01:01:0**1, 02:01:01:03-**02:01:02**, **02:01:04**-02:01:15, **02:01:18**-02:01:19, 02:01:21-**02:01:51,** 02:01:53-02:01:62, 02:01:64-02:01:73, 02:01:75-02:01:81, **02:01:84**-02:01:86, 02:201, 02:204, 02:208, 02:210, 02:212, 02:216-02:218, 02:220, 02:231, 02:234, 02:236, 02:238-02:241, 02:249, 02:252, 02:256-02:257, 02:262, 02:266, 02:270, 02:272-02:273, 02:276-02:277, 02:285, 02:287-02:288, 02:292, 02:294, 02:296, 02:302, 02:306-02:307, 02:311-02:313, 02:316, 02:318, 02:326-02:327, 02:329, 02:332, 02:336, 02:340-02:343, 02:346, 02:348-02:349, 02:352-02:354, 02:357, 02:360, 02:362-02:363, 02:365, 02:368, 02:374-02:375, 02:377, 02:379-02:381, 02:383-02:386, 02:388-02:392, 02:396-02:397, 02:401
	+																																															***02:01:01:02L**
																																																***02:01:03**, 02:243, 02:394
																																																*02:01:17, **02:01:52,** 02:01:63, 02:01:74, 02:372, 02:378
						+																																								*02:01:83, **02:30**, 02:399
																																																***02:02,** 02:209, 02:320
																																																***02:03:01**, **02:03:03**-02:03:04, 02:253, 02:258, 02:264, 02:281, 02:345, 02:370
																																																*02:03:02
4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	**Well No.**
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	**HLA-A allele[2,3]**
4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	**Well No.**
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	**HLA-A allele[2,3]**

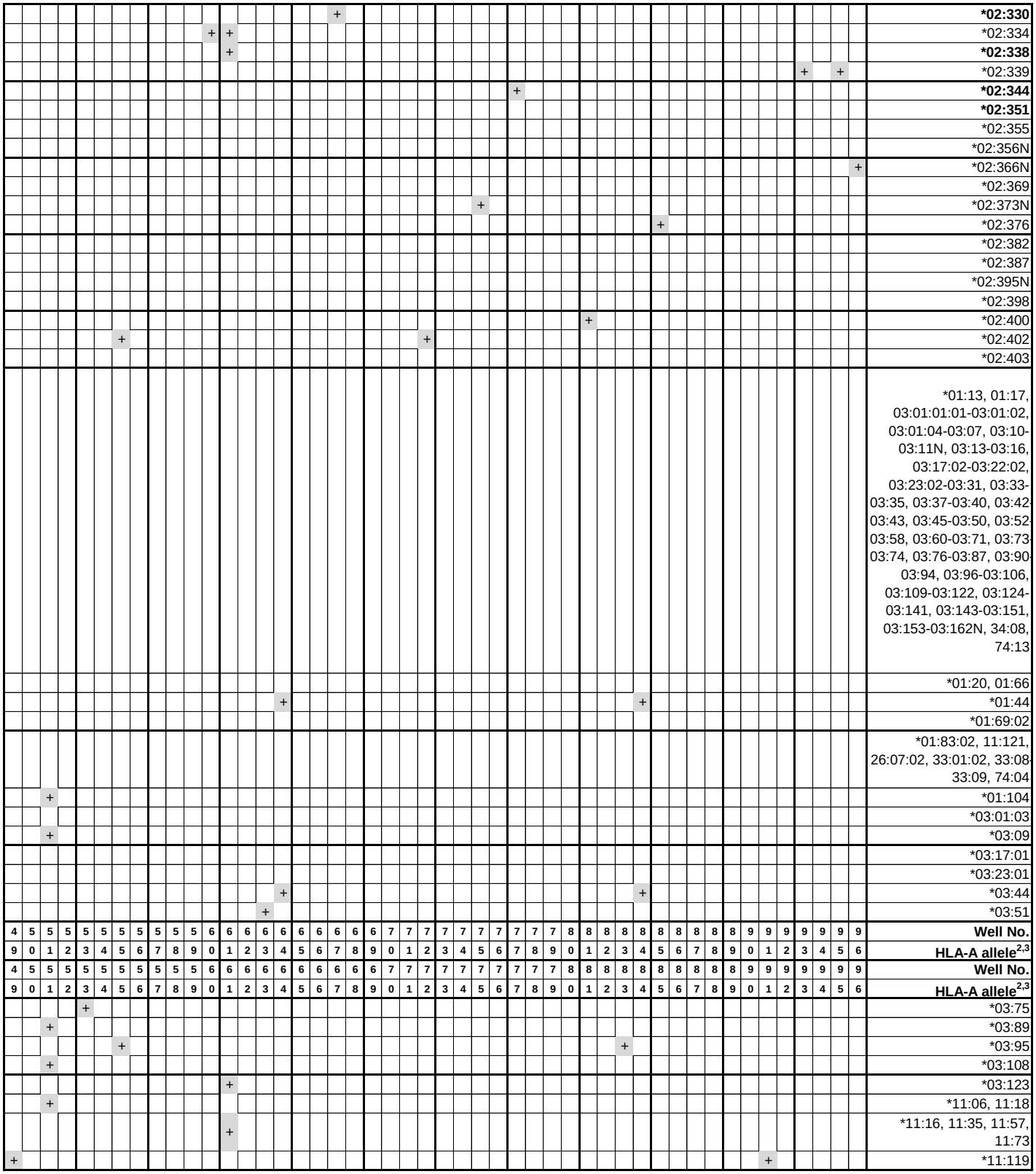

*02:04
02:05:01-02:05:06, 02:229, 02:232, 02:286, 02:324, 02:337, 02:359
02:06:01-**02:06:11**, 02:06:13, 02:248, 02:278, 02:290, 02:328, 02:333
*02:06:12
02:07:01-02:07:02, 02:219, 02:261, 02:265, 02:335
02:08
02:09
02:10, 02:244
02:11:01, 02:11:03-02:11:04, 02:297-02:298, 02:308
02:11:02
02:12
02:13
02:14
*02:15N
*02:16
02:17:01-02:17:02, 02:303
*02:18
*02:19
02:20:01-02:20:02
*02:21
02:22:01-02:22:02
02:24:01-02:24:02
02:25
*02:26
02:27
02:28
02:29
*02:31
*02:32N
02:33
*02:34
02:35:01
*02:35:02
*02:35:03
02:36
*02:37
02:38
02:39
02:40:01-02:40:02
02:41
02:42
*02:43N
02:44
*02:45
*02:46
*02:47
02:48
02:49
*02:50
02:51
*02:52
02:53N
Well No.
HLA-A allele[2,3]
Well No.
HLA-A allele[2,3]
02:54
02:55


*02:56:01
*02:56:02
*02:57
***02:58**
*02:59, **02:203**
***02:60:01**-02:60:02, 02:254
***02:61**
*02:62
*02:63
***02:64**
*02:65
*02:66
*02:67
*02:68
*02:69
*02:70
*02:71
*02:72
*02:73
*02:74:01-02:74:02
*02:75
***02:76:01**-02:76:02
***02:77**
*02:78
*02:79:01-02:79:02
***02:80**
*02:81
***02:82N**
*02:83N
***02:84**
***02:85**
***02:86**
***02:87**
*02:88N
*02:89
***02:90**, 02:331
*02:91
*02:92
***02:93**
*02:94N
*02:95
***02:96**
*02:97:01-02:97:02, 02:305N[4]
*02:99
*02:101:01-**02:101:02**
***02:102**
*02:103
*02:104
***02:105**
*02:106
*02:107, **02:202**, **02:251**[5]
*02:108
*02:109
***02:110**
*02:111, 02:350N[6]
*02:112
***02:113N**
***02:114**
Well No.
HLA-A allele[2,3]
Well No.
HLA-A allele[2,3]
*02:115
*02:116
*02:117



	***02:118**
	***02:119**, **02:263**[7]
	*02:120, 02:223N[8]
	***02:121**
	***02:122**
	***02:123**
	*02:124
	***02:125N**
	*02:126
	*02:127
	***02:128**
	***02:129**
	*02:130
	***02:131**
	*02:132, **02:215**, **02:237**[9]
	***02:133**
	*02:134, 02:314N[10]
	*02:135
	***02:136**
	*02:137
	*02:138, 02:284N[11]
	***02:139**, **02:235**[12]
	*02:140
	***02:141**, **02:275**[13]
	*02:142
	*02:143
	*02:144
	*02:145, **02:221**
	***02:146**
	***02:147**
	*02:148
	***02:149**
	*02:150, **02:197**, **02:325**[14]
	***02:151**
	*02:152
	***02:153**, 02:196[15]
	***02:154**
	*02:155
	*02:156
	*02:157
	***02:158**
	*02:159, 02:293Q, 02:364
	***02:160**
	***02:161**
	*02:162
	***02:163**
	***02:164**
	***02:165**
	***02:166**
	*02:167, **02:299**
	*02:168
	***02:169**
	*02:170
Well No.	**Well No.**
HLA-A allele[2,3]	**HLA-A allele**[2,3]
	*02:171:01-02:171:02
	***02:172**
	***02:173**
	*02:174, **02:228**
	*02:175
	*02:176
	***02:177**
	*02:178

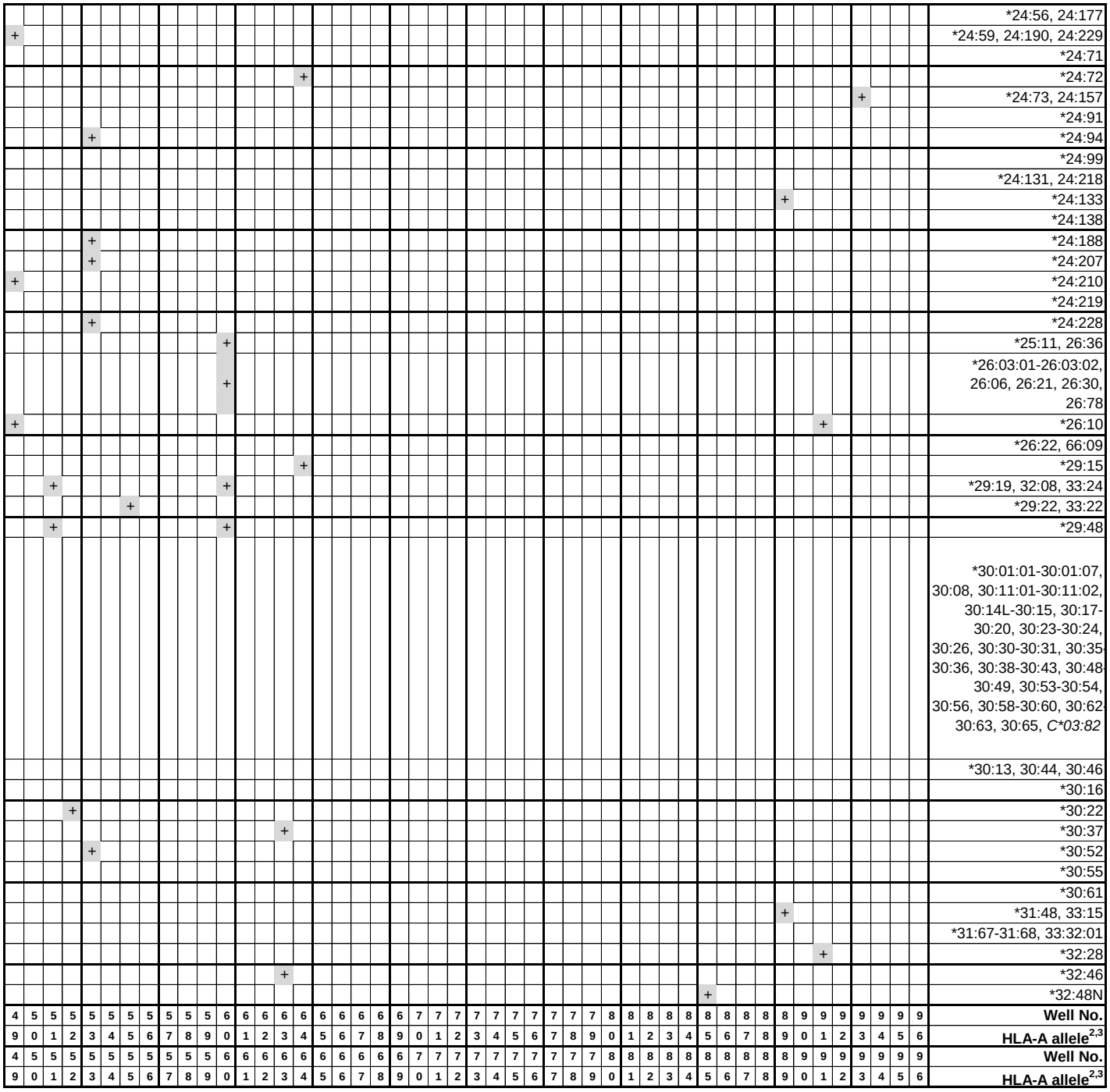

*02:179
*02:180, 02:358[16]
*02:181
*02:182
*02:183
*02:184
*02:185
*02:186
*02:187
*02:188
*02:189
*02:190
*02:191
*02:192
*02:193, 02:213[17]
*02:194
*02:195
*02:198
*02:199
*02:200
*02:205
*02:206
*02:207
*02:211:01
*02:211:02
*02:214
*02:222N
*02:224, 02:371
*02:225N
*02:226N
*02:227N
*02:230
*02:233
*02:242
*02:245
*02:246
*02:247
*02:250N
*02:255
*02:259
*02:260
*02:267
*02:268
*02:269, 02:367[18]
*02:271
*02:274
*02:279
*02:280
*02:282
*02:283
*02:289
*02:291
Well No.
HLA-A allele[2,3]
Well No.
HLA-A allele[2,3]
*02:295
*02:300
*02:301N
*02:304
*02:309
*02:310
*02:315
*02:317, 02:347, 02:361
*02:319
*02:321N
*02:322
*02:323


*02:330
*02:334
*02:338
*02:339
*02:344
*02:351
*02:355
*02:356N
*02:366N
*02:369
*02:373N
*02:376
*02:382
*02:387
*02:395N
*02:398
*02:400
*02:402
*02:403
*01:13, 01:17, 03:01:01:01-03:01:02, 03:01:04-03:07, 03:10-03:11N, 03:13-03:16, 03:17:02-03:22:02, 03:23:02-03:31, 03:33-03:35, 03:37-03:40, 03:42-03:43, 03:45-03:50, 03:52-03:58, 03:60-03:71, 03:73-03:74, 03:76-03:87, 03:90-03:94, 03:96-03:106, 03:109-03:122, 03:124-03:141, 03:143-03:151, 03:153-03:162N, 34:08, 74:13
*01:20, 01:66
*01:44
*01:69:02
*01:83:02, 11:121, 26:07:02, 33:01:02, 33:08-33:09, 74:04
*01:104
*03:01:03
*03:09
*03:17:01
*03:23:01
*03:44
*03:51
Well No.
HLA-A allele[2,3]
Well No.
HLA-A allele[2,3]
*03:75
*03:89
*03:95
*03:108
*03:123
*11:06, 11:18
*11:16, 11:35, 11:57, 11:73
*11:119

				+																																												*23:01:01-23:01:11, 23:05-23:07N, 23:09, 23:11N, 23:13, 23:14:02-23:23, 23:25-23:30, 23:32-23:33, 23:35-23:40, 23:42, 23:44, 23:46, 23:48-23:51, 23:53-23:54, 23:56, 24:24
																																																*23:02
				+																																												*23:03:01-23:03:02, 29:07, 31:29
				+																																												*23:04, 23:43
				+																																												*23:08N
w				+																																												*23:10
				+																																												*23:12
																																																*23:14:01
				+																																												*23:24, 24:13:01
				+																																						+						*23:31, 23:45, 23:55
																																																*23:34, 24:13:02
				+											+																																	*23:41
				+																							+																					*23:47
				+																																								+				*23:52
																																																*24:02:01:01-24:02:15, 24:02:17-24:02:41, 24:02:43-24:02:64, 24:04-24:05, 24:07-24:09N, 24:11N, 24:17, 24:19-24:20, 24:25-24:27, 24:29, 24:31-24:32, 24:34-24:40N, 24:43-24:45N, 24:47-24:50, 24:52-24:53, 24:57-24:58, 24:60N-24:64, 24:66-24:70, 24:74, 24:76-24:86N, 24:88, 24:90N, 24:95-24:98, 24:100-24:106, 24:108-24:109, 24:111-24:124, 24:126-24:130, 24:132N, 24:134-24:137, 24:139-24:156, 24:159, 24:161-24:166, 24:168-24:176, 24:178-24:187, 24:189, 24:191-24:203, 24:205-24:206, 24:209, 24:212, 24:214-24:217, 24:220-24:226, 24:230, 33:19
																																																*24:02:16, 24:06, 24:54, 24:87, 24:107, 24:160, 24:213, 24:227
4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	**Well No.**
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	**HLA-A allele[2,3]**

4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	**Well No.**
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	**HLA-A allele[2,3]**

																																																*24:03:01-24:03:02, 24:33, 24:75
+																																																*24:10:01-24:10:02
																																																*24:14, 24:93
																																										+						*24:15, 24:41, 24:51, 24:92
				+																																												*24:18
																																																*24:23
																																																*24:28, 24:30, 24:42, 24:89
w																																																*24:46
																																																	*24:55


*24:56, 24:177
*24:59, 24:190, 24:229
*24:71
*24:72
*24:73, 24:157
*24:91
*24:94
*24:99
*24:131, 24:218
*24:133
*24:138
*24:188
*24:207
*24:210
*24:219
*24:228
*25:11, 26:36
*26:03:01-26:03:02, 26:06, 26:21, 26:30, 26:78
*26:10
*26:22, 66:09
*29:15
*29:19, 32:08, 33:24
*29:22, 33:22
*29:48
*30:01:01-30:01:07, 30:08, 30:11:01-30:11:02, 30:14L-30:15, 30:17-30:20, 30:23-30:24, 30:26, 30:30-30:31, 30:35-30:36, 30:38-30:43, 30:48-30:49, 30:53-30:54, 30:56, 30:58-30:60, 30:62-30:63, 30:65, C*03:82
*30:13, 30:44, 30:46
*30:16
*30:22
*30:37
*30:52
*30:55
*30:61
*31:48, 33:15
*31:67-31:68, 33:32:01
*32:28
*32:46
*32:48N
Well No.
HLA-A allele[2,3]
Well No.
HLA-A allele[2,3]

4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	Well No.
9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	HLA-A allele[2]
												+	+																																*68:01:01:01-68:01:10, 68:01:12-68:01:13, 68:01:15-68:01:18, 68:03:01-68:04, 68:07, 68:10-68:11N, 68:13:01-68:13:02, 68:16-68:17, 68:19, 68:21:01-68:22, 68:24, 68:29, 68:32, 68:35-68:39, 68:41, 68:43, 68:45-68:47, 68:52, 68:55-68:59N, 68:66, 68:68-68:70, 68:72-68:73, 68:75, 68:79, 68:84-68:85, 68:87-68:91, 68:93-68:95, 68:98-68:99
												+	+																																*68:01:11
												+	+																																*68:01:14
												+	+																																*68:02:01:01-68:02:05, 68:18N, 68:27-68:28, 68:31, 68:34, 68:40, 68:53, 68:60, 68:62, 68:64, 68:67, 68:74, 68:77-68:78, 68:80, 68:82, 68:86, 68:92, 68:97
		+									+	+	+																																*68:05, 68:20
												+	+																																*68:06
												+	+																																*68:08:01-68:08:02
												+	+																																*68:09
													+																																*68:12
												+	+										+																						*68:14
											+	+	+																																*68:15
												+	+																																*68:23
												+	+																																*68:25
												+	+																																*68:26
												+	+																																*68:30
												+																																*68:33, 68:96
												+	+																																*68:42
													+																																*68:44
												+	+																																*68:48
													+										+																						*68:49N
													+																																*68:50
												+	+																																*68:51
												+	+																																*68:54
+												+	+																																*68:61
												+	+																																*68:63
												+	+																																*68:65
												+	+																																*68:71
												+	+																																*68:76
												+	+										+																						*68:81
													+																																*68:83
																																													*69:01
		+									+																																		*74:06
		W																																												*80:01:01:01
																																	+													*B*15:67, B*35:110*
																																										+			*B*15:173, B*18:63*
																							+																						*B*44:59:02*
																																													*B*44:136*
																																													*B*51:136*
+																																													*C*07:204*
																																													*C*12:37*
																																	+													*C*12:94, C*14:48*