

INTERPRETATION TABLE

HLA-B*39 SSP subtyping

Amplification patterns of the B*39:01 to 39:63 alleles

	Well ⁷															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Length of int.	800	1070	800	1070	800	800	1070	1070	800	800	1070	800	800	1070	800	800
pos. control ¹																
5'-primer(s) ²	355	142	142	246	246	142	363	106	357	206	419	44	246	272	97	360
	5'-CCC 3'	5'-TCT 3'	5'-TCT 3'	5'-gAA 3'	5'-gAA 3'	5'-TCT 3'	5'-AgC 3'	5'-CCA 3'	5'-Tgg 3'	5'-gAC 3'	5'-gTT 3'	5'-ggC 3'	5'-gAA 3'	5'-CTA 3'	5'-TCg 3'	5'-CAC 3'
	355		419	419	246		420	420	668	419		412	503		97	368
	5'-CTC 3'		5'-gTC 3'	5'-gTT 3'	5'-gAA 3'		5'-TTA 3'	5'-TTC 3'	5'-ggC 3'	5'-gTC 3'		5'-ATg 3'	5'-CCg 3'		5'-TCC 3'	5'-gTC 3'
								646							141	419
								5'-ACg 3'							5'-ATg 3'	5'-gTA 3'
															419	
															5'-gTT 3'	
3'-primer(s) ³	544	272	292	272	311	272	544	246	544	272	539	79	299	311	246	544
	5'-ggT 3'	5'-TgC 3'	5'-gTA 3'	5'-TgA 3'	5'-ggT 3'	5'-Tgg 3'	5'-ggT 3'	5'-TAT 3'	5'-ggT 3'	5'-TgC 3'	5'-TCC 3'	5'-gTA 3'	5'-TCA 3'	5'-ggT 3'	5'-TAT 3'	5'-ggT 3'
			292	344				559	839	544	539	544	344		563	
			5'-gTA 3'	5'-ACg 3'				5'-CTC 3'	5'-ATA 3'	5'-ggT 3'	5'-TCC 3'	5'-ggT 3'	5'-ACg 3'		5'-CgA 3'	
			292	524				916			564		544			
			5'-gTA 3'	5'-CAA 3'				5'-gAC 3'			5'-ACT 3'		5'-ggT 3'			
			583								565					
			5'-gTg 3'								5'-CAT 3'					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HLA-B allele ⁴																
*39:01:01:01, 39:01:03, 39:01:06-39:01:08, 39:01:10-39:01:12	1	2			5											
*39:01:01:02L, 39:60 ⁵	1	2			5											
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*39:01:04	1	2			5											
*39:01:05	1	2			5											
*39:01:09	1	2														
*39:02:01	1				5	6										
*39:02:02	1					6										
*39:03	1	2			5		7									
*39:04	1	2			5			8								
*39:05:01-39:05:02	1	2	3		5											
*39:06:01-39:06:02		2			5				9							
*39:07	1	2	3		5					10		12				
*39:08	1		3		5	6					11					
*39:09	1	2			5											16
*39:10, 67:01:02 ⁶	1													14		
*39:11	1	2	3		5						11					
*39:12	1	2			5										15	
*39:13:01-39:13:02	1		3			6										
*39:14	1	2			5		7									16
*39:15	1	2			5							12				
*39:16	1													14		16
*39:17	1						7							14		
*39:18	1	2			5						11					
*39:19:01	1	2								10						
*39:19:02	1	2			5					10						
*39:20	1		3											14		
*39:22	1	2			5											
*39:23	1					6								13		
*39:24:01-39:24:02	1	2			5		7									
*39:25N	1	2			5											
*39:26	1	2		4	5											
*39:27	1	2			5									13		
*39:28	1	2			5											
*39:29	1	2			5		7					12				16
*39:30		2			5											
*39:31	1	2			5										15	
*39:32		2			5											
*39:33		2			5						11					
*39:34		2			5											
*39:35	1	2			5											
*39:36		2			5						11					
*39:37	1	2	3		5		7									
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165

PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*39:38Q	1	2			5										15	
*39:39	1				5	6										
*39:40N	1	2			5						11					
*39:41	1	2			5											
*39:42		2			5											
*39:43		2	3		5											
*39:44	1	2			5								13			
*39:45	1	2			5											
*39:46	1	2			5			8								
*39:47		2			5			8								
*39:48	1	2			5											
*39:49	1		3			6						12				
*39:50		2			5			8								
*39:51	1	2		4	5								13			
*39:52	1				5											
*39:53	1	2			5						11					
*39:54	1				5										15	
*39:55	1	2	3		5							12				
*39:56	1	2	3		5											
*39:57		2			5				9		11					
*39:58	1			4	5											
*39:59	1	2			5				9							
*39:61	1	2			5							12				
*39:62		2			5				9							
*39:63	1													14		
*07:02:01-07:07, 07:09, 07:11-07:12, 07:14-07:15, 07:17-07:26, 07:28-07:31, 07:33-07:35, 07:39-07:47, 07:49N, 07:51-07:53, 07:55-07:64, 07:66-07:68:02, 07:70-07:74, 07:76-07:77, 07:79-07:80, 07:82, 07:86-07:90, 07:92-07:122, 07:124-07:130, 42:01:01-42:02, 42:05:01-42:10, 42:12-42:16														14		
*07:08, 07:10, 07:32, 07:36, 07:81, 07:83, 08:01:01-08:02, 08:05, 08:07-08:08N, 08:11-08:12:03, 08:14-08:16, 08:18-08:22, 08:24, 08:26-08:37, 08:39-08:53, 08:56-08:64, 08:66-08:70																
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220

				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*07:16, 07:37, 07:75, 07:91			3											14		
*07:27, 07:50			3			6										
*07:38, 08:03, 08:23			3													
*07:48, 81:02														14		
*07:54, 07:65, 07:123, 15:11:01-15:11:05, 15:76, 15:101, 15:143, 15:148, 15:152, 15:209N, 15:215, 44:90, 45:06, 54:06, 55:01:07, 55:14, 56:03, 56:05:01-56:06, 56:32, 83:01														14		
*07:69, 07:85, 08:65		2														
*07:78											11			14		
*07:84, 42:04														14		
*08:04						6										
*08:09, 73:01-73:02																
*08:13, 08:25																
*08:17, 15:61						6										
*08:38																
*08:54, 15:03:01-15:03:03, 15:47, 15:54, 15:62, 15:68, 15:98, 15:103, 15:127, 15:131-15:132, 15:156, 15:158, 15:173, 15:210, 37:01:01-37:01:07, 37:03N-37:07, 37:09-37:20, 37:23-37:25, 37:27-37:29, 42:11, 48:05, 48:08, 48:15, 48:19, 48:24-48:25, 52:16			3			6										
*08:55	1						7									16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

<p>*13:01:01-13:01:06, 13:04, 13:06-13:07N, 13:10-13:13, 13:17, 13:21-13:23, 13:25-13:26, 13:28-13:29, 13:36, 13:39, 13:43, 15:05:01-15:05:02, 15:20, 15:31, 15:55, 15:86, 15:107, 15:155, 15:188, 15:222, 15:224, 27:01-27:03, 27:05:02-27:05:16, 27:07-27:09, 27:11-27:13, 27:16-27:17, 27:19, 27:23, 27:26-27:39, 27:41-27:44, 27:46, 27:48-27:53, 27:55-27:62, 27:64N-27:65N, 27:67, 27:70-27:78, 27:80, 35:01:01:01-35:02:04, 35:03:06, 35:04:01-35:05:02, 35:07, 35:09:01-35:10, 35:12:01-35:12:03, 35:15-35:17, 35:19-35:20:02, 35:22-35:23, 35:27-35:34, 35:37, 35:39-35:42:02, 35:46-35:54, 35:57, 35:63-35:65Q, 35:68:01-35:69, 35:71-35:72, 35:77-35:78, 35:81, 35:83, 35:88-35:95, 35:97, 35:101:01-35:101:02, 35:103-35:104, 35:107-35:108:02, 35:110-35:114, 35:116, 35:119-35:123, 35:126, 35:129N-35:134N, 35:137-35:140, 35:143-35:149, 35:154, 35:157, 35:159, 35:161, 40:01:01-40:01:11, 40:01:13-</p>																
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*13:03, 35:03:01-35:03:05, 35:03:07-35:03:09, 35:06, 35:13, 35:36, 35:55-35:56, 35:59, 35:70, 35:74-35:75, 35:84, 35:98, 35:106, 35:127-35:128, 35:136, 35:150-35:153, 35:155, 35:160, 40:71, 44:10, 46:11, 51:15, 53:04, 56:07-56:08, 56:14, 58:34, 59:04																
*13:15																
*13:16, 13:46, 15:42, 15:83, 40:95, 40:148, 40:161, 41:01, 41:05-41:07, 41:09, 41:12, 41:14, 41:16, 45:08, 45:10, 49:07, 51:16, 51:21, 51:34, 51:36, 51:82, 52:08, 78:07																
*13:18, 13:31, 13:41											11					
*14:01:01-14:01:02, 14:07N, 14:12, 14:19		2			5											
*14:02:01-14:02:02, 14:02:04, 14:03, 14:09, 14:11, 14:15-14:17, 14:20, 14:22-14:24		2			5											
*14:02:03, 14:02:06		2														
*14:02:05		2														
*14:04		2			5											
*14:05-14:06:02, 14:13		2			5											
*14:08, 14:10		2			5											
*14:14		2	3		5											
*14:18		2	3		5											
*14:21														14		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*15:09-15:10:02, 15:18:01-15:18:04, 15:23, 15:37, 15:51, 15:72, 15:80, 15:90, 15:93, 15:99, 15:108, 15:115, 15:119, 15:134, 15:153, 15:161, 15:176, 15:197-15:198, 15:200, 15:221		2	3													
*15:29, 15:38:01-15:38:02, 35:21, 35:142, 51:37, 51:45, 51:63, 51:97, 53:06			3													
*15:49, 15:74, 37:21, 37:26			3													
*15:52, 15:114, 15:124		2	3													
*15:58, 15:73											11					

*15:64, 18:13, 18:15, 18:19, 18:21, 18:30, 18:56-18:57, 37:08			3			6											
*15:69	1		3			6			10		12						
*15:91, 15:123, 15:151, 18:12, 37:02, 40:12, 40:149, 44:130, 48:01:01-48:02:01, 48:03:01-48:04, 48:09-48:14, 48:17-48:18, 48:20-48:23			3			6											
*15:133		2	3														
*15:185, 18:04, 18:07:01-18:07:02, 18:29, 35:24:01-35:25, 35:124-35:125, 35:162, 53:02, 57:14, 58:09, 58:12			3														
*15:186	1	2	3						10		12						
*15:189					5			8									
*18:01:01-18:03, 18:05-18:06, 18:08-18:11, 18:14, 18:17N-18:18, 18:20, 18:22-18:28, 18:31-18:32, 18:34-18:43, 18:45-18:55, 18:58-18:63, 48:16			3			6											
*18:33		2	3						10								
*18:44			3			6											
*35:26					5			8									
*35:35									10		12						
*35:38, 35:156, 35:163, C*15:15																	
*35:76, 40:61, 54:09, 55:04, 55:08, 55:49, 55:51, 56:09-56:10, 56:12, 56:15, 56:18, 81:01, 81:03-81:04N														14			
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*35:82										10						
*35:85										10						
*35:96, C*15:39																
*35:109																
*35:135, 51:22, 78:03										10						
*38:01:01-38:01:02, 38:01:04- 38:02:02, 38:09, 38:11-38:12, 38:17- 38:18, 38:21, 38:24, 38:27	1	2	3													
*38:01:03	1	2	3													
*38:02:03, 38:05	1	2	3													
*38:03	1					6										
*38:04, 38:25	1	2	3													
*38:06	1		3													
*38:07	1		3													
*38:08		2	3													
*38:10, 38:23		2	3													
*38:13	1	2														
*38:14	1	2														
*38:15		2	3													
*38:16, 38:28	1															
*38:19	1	2	3				7									
*38:20		2	3													
*38:22	1	2	3													
*38:26	1															
*38:29	1	2	3									12				
*38:30		2	3													
*40:25, 40:68, 40:106																
*40:36, 40:77								8								
*40:86								8								
*44:118								8								
*48:06			3													
*48:07			3			6	8									
*51:13:01-51:13:02, 51:62, 51:92, 51:106, 52:14																
*51:101									9							16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	230	170	200	65	105	170	165	180	220	105	170	175	85	80	145	165
PCR product(s)				145			220	405		165		205	385		190	220
				385												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

INTERPRETATION TABLE

HLA-B*39 SSP subtyping

Amplification patterns of the B*39:01 to 39:63 alleles

Well ⁷																	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230	Length of spec.	
205			215		225			235		205	180		190			PCR product(s)	
800	800	1070	800	800	800	800	1070	1070	800	800	1070	800	800	800	800	Length of int.	
																pos. control ¹	
44	142	44	246	363	142	246	103	-149	361	141	419	357	142	544	112	5'-primer(s) ²	
5'-ggC ^{3'}	5'-TCT ^{3'}	5'-ggC ^{3'}	5'-gAA ^{3'}	5'-Agg ^{3'}	5'-TCT ^{3'}	5'-gAA ^{3'}	5'-CCT ^{3'}	5'-ggg ^{3'}	5'-AgT ^{3'}	5'-ATT ^{3'}	5'-gTT ^{3'}	5'-Tgg ^{3'}	5'-TCT ^{3'}	5'-gAg ^{3'}	5'-CCT ^{3'}		
407			368		362		103	419		419			385		355		
5'-ggg ^{3'}			5'-gTC ^{3'}		5'-gAC ^{3'}		5'-CCT ^{3'}	5'-gTT ^{3'}		5'-gTT ^{3'}			5'-ggT ^{3'}		5'-TCA ^{3'}		
			486										527		365		
			5'-ACg ^{3'}										5'-TgA ^{3'}		5'-CAC ^{3'}		
79	259	259	299	544	250	292	246	44	583	272	518	559	280	3 rd I	311	3'-primer(s) ³	
5'-gTA ^{3'}	5'-CTC ^{3'}	5'-gTT ^{3'}	5'-TCA ^{3'}	5'-ggT ^{3'}	5'-CCg ^{3'}	5'-gTC ^{3'}	5'-TAT ^{3'}	5'-CCg ^{3'}	5'-gTg ^{3'}	5'-TgT ^{3'}	5'-CCC ^{3'}	5'-CgT ^{3'}	5'-gTC ^{3'}	5'-TAT ^{3'}	5'-ggT ^{3'}		
544		259	544		544	292	246	527		563	559	559	544		544		
5'-ggT ^{3'}		5'-gTT ^{3'}	5'-ggT ^{3'}		5'-ggT ^{3'}	5'-gTC ^{3'}	5'-TAT ^{3'}	5'-CCg ^{3'}		5'-CgA ^{3'}	5'-CAg ^{3'}	5'-CTC ^{3'}	5'-ggT ^{3'}		5'-ggT ^{3'}		
										583	564						
										5'-gTg ^{3'}	5'-ACT ^{3'}						
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	
																HLA-B allele ⁴	
		19		21		23	24									*39:01:01:01, 39:01:03, 39:01:06-39:01:08, 39:01:10-39:01:12	
		19		21		23	24	25								*39:01:01:02L, 39:60 ⁵	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	

180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230	Length of spec.	
205			215		225			235		205	180		190			PCR product(s)	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	
		19		21			24										*39:01:04
		19	20	21		23	24										*39:01:05
		19		21													*39:01:09
	18			21		23	24										*39:02:01
	18			21													*39:02:02
		19				23	24										*39:03
		19		21		23											*39:04
		19		21			24										*39:05:01-39:05:02
		19				23	24					29					*39:06:01-39:06:02
		19		21			24										*39:07
	18			21			24										*39:08
		19	20	21		23	24										*39:09
		19		21													*39:10, 67:01:02 ⁶
		19		21			24										*39:11
		19		21		23											*39:12
	18			21													*39:13:01-39:13:02
		19				23	24										*39:14
		19		21		23	24										*39:15
		19															*39:16
		19		21													*39:17
		19	20	21		23	24						30				*39:18
		19		21													*39:19:01
		19		21		23	24										*39:19:02
		19		21													*39:20
	18			21		23	24										*39:22
	18			21													*39:23
		19				23	24								32		*39:24:01-39:24:02
17		19		21		23	24										*39:25N
		19		21		23	24										*39:26
		19	20	21		23	24										*39:27
		19			22	23	24										*39:28
		19				23	24										*39:29
		19				23	24							31			*39:30
		19		21		23	24										*39:31
		19				23	24			27	28						*39:32
		19				23	24				28						*39:33
		19				23	24					29		31			*39:34
		19		21		23	24						30				*39:35
		19				23	24										*39:36
		19					24										*39:37
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	
180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230	Length of spec.	

205			215		225			235		205	180		190				PCR product(s)
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		Well No.
		19		21		23	24			27							*39:38Q
		19		21		23	24										*39:39
		19		21		23	24				28						*39:40N
		19		21		23	24								32		*39:41
		19		w		23	24								32		*39:42
		19				23	24							31			*39:43
		19		21		23	24										*39:44
		19		21	22	23											*39:45
		19		21		23	24										*39:46
		19				23	24										*39:47
		19		21		23	24			27							*39:48
18				21													*39:49
		19				23	24					29					*39:50
		19		21		23	24										*39:51
		19		21		23	24						30				*39:52
		19		21		23	24										*39:53
		19		21		23	24										*39:54
		19		21			24										*39:55
		19		21			24				28						*39:56
		19				23	24					29					*39:57
		19		21		23	24										*39:58
		19		21		23	24										*39:59
17		19		21		23	24										*39:61
		19				23	24					29	30				*39:62
		19		21						27							*39:63
		19															*07:02:01-07:07, 07:09, 07:11-07:12, 07:14-07:15, 07:17-07:26, 07:28-07:31, 07:33-07:35, 07:39-07:47, 07:49N, 07:51-07:53, 07:55-07:64, 07:66-07:68:02, 07:70-07:74, 07:76-07:77, 07:79-07:80, 07:82, 07:86-07:90, 07:92-07:122, 07:124-07:130, 42:01:01-42:02, 42:05:01-42:10, 42:12-42:16
		19															*07:08, 07:10, 07:32, 07:36, 07:81, 07:83, 08:01:01-08:02, 08:05, 08:07-08:08N, 08:11-08:12:03, 08:14-08:16, 08:18-08:22, 08:24, 08:26-08:37, 08:39-08:53, 08:56-08:64, 08:66-08:70
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		Well No.
180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230		Length of spec.
205			215		225			235		205	180		190				PCR product(s)

180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230	Length of spec.	
205			215		225			235		205	180		190			PCR product(s)	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	
														31		*35:82	
										28				31		*35:85	
										27						*35:96, C*15:39	
										27	28			31		*35:109	
																*35:135, 51:22, 78:03	
		19		21			24									*38:01:01-38:01:02, 38:01:04-38:02:02, 38:09, 38:11-38:12, 38:17-38:18, 38:21, 38:24, 38:27	
		19	20	21			24									*38:01:03	
		19		21												*38:02:03, 38:05	
18				21			24									*38:03	
18				21												*38:04, 38:25	
		19		21												*38:06	
		19		21			24									*38:07	
		19		w			24									*38:08	
		19					24									*38:10, 38:23	
		19		21			24									*38:13	
		19		21		w	24									*38:14	
		19		21			24									*38:15	
		19		21			24									*38:16, 38:28	
		19					24									*38:19	
		19					24								32	*38:20	
		19					24									*38:22	
		19		21		w	24									*38:26	
		19		21			24									*38:29	
		19					24				28					*38:30	
		?												31		*40:25, 40:68, 40:106	
														31		*40:36, 40:77	
										29				31		*40:86	
																*44:118	
		19												31		*48:06	
18														31		*48:07	
										27	28					*51:13:01-51:13:02, 51:62, 51:92, 51:106, 52:14	
												29	30			*51:101	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	
180	160	385	100	220	150	85	185	150	265	180	140	245	60	155	230	Length of spec.	
205			215		225			235		205	180		190			PCR product(s)	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.	

