101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

Visit www.olerup.com for **"Instructions for Use" (IFU)**

Lot No.: 4G7 **Lot-specific information**

Olerup SSP® HLA-C*08

Product number:	**101.623-12 – including *Taq* polymerase** **101.623-12u – without *Taq* polymerase**
Lot number:	**4G7**
Expiry date:	**2021-01-01**
Number of tests:	**12**
Number of wells per test:	**41+1**
Storage - pre-aliquoted primers:	**dark at -20ºC**
- PCR Master Mix:	**-20ºC**
- Adhesive PCR seals	**RT**
- Product Insert	**RT**

This Product Description is only valid for Lot No. 4G7.

Complete product documentation consists of generic Instructions for Use (IFU), lot specific Product Insert, Worksheet and Certificate.

CHANGES COMPARED TO THE PREVIOUS *OLERUP* SSP® HLA-C*08 LOT (1F2)

The HLA-C*08 kit is updated for new alleles to enable separation of:

- Null and Alternatively expressed alleles
- The product documentation has been updated for new alleles of IMGT 3.31

One well has been added to HLA-C*08, well **42**.

The format of the Worksheet has been changed.

The HLA-C*08 primer set, specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup* SSP® HLA-C*08 lot was made **(Lot No. 1F2)**.

Lot No.: 4G7 **Lot-specific information**

The primers of the wells detailed below have been exchanged, added or modified compared to the previous lot.

Well	5'-primer	3'-primer	rationale
16	Modified	Modified	Primer pair modified for increased yield and improved HLA-specific amplification.
35	Modified	-	5'-primer modified for improved HLA-specific amplification.
41	New	New	Negative Control moved to well 42. New primer pair for improved allelic resolution of the C*08:01 and the C*08:03 alleles.
42	-	-	Negative Control added from well 41.

101.623-12 – including *Taq* pol., IFU-01
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Lot No.: 4G7 **Lot-specific information**

Well **42** contains Negative Control primer pairs, that will amplify more than 95% of the *Olerup* SSP® HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene.

HLA-specific PCR product sizes range from 75 to 200 base pairs.
The PCR product generated by the positive control primer pair is 430 base pairs.

Length of PCR product	**105**	**200**	**105**	**80**	**75**	**80**	**85**
5'-primer[1]	**164**	**340**	**440**	**45**	**45**	**43**	**36**
	5'-CAC3'	**5'-Agg3'**	**5'-TTA3'**	**5'-Tgg3'**	**5'-Tgg3'**	**5'-Tgg3'**	**5'-TAC3'**
							36
							5'-TAT3'
3'-primer[2]	**231**	**2nd I**	**507**	**59**	**58**	**57**	**47**
	5'-TgC3'	**5'-AAA3'**	**5'-TTg3'**	**5'-CTC3'**	**5'-ggC3'**	**5'-CTC3'**	**5'-ACA3'**
							48
							5'-gCA3'
							48
							5'-gCC3'
							52
							5'-TgT3'
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

[1]The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codonnumbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.
[2]The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon or the 2nd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

PRODUCT DESCRIPTION

HLA-C*08 SSP typing

CONTENT

The primer set contains 5'- and 3'-primers for identifying the C*08:01 to C*08:159 alleles.

PLATE LAYOUT

Each HLA-C*08 test consists of 42 PCR reactions in a 48 well cut PCR plate. Wells 43 to 48 are empty.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	NC	empty	empty	empty	empty	empty	empty

The 48 well PCR plate is marked with 'HLA-C*08' in silver/gray ink.
Well No. 1 is marked with the Lot No. '4G7'.
Wells 1 to 41 – HLA-C*08 high resolution primers.
Well 42 – Negative Control (NC).
A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays and should be disregarded.
The PCR plates are heat-sealed with a PCR-compatible foil.
Please note: When removing each 48 well PCR plate, make sure that the remaining plates stay sealed. Use a scalpel or a similar instrument to carefully cut the foil between the plates.

INTERPRETATION

Due to the sharing of sequence motifs between HLA-A alleles non-HLA-C*08 alleles will be amplified by some primer mixes. For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All the HLA-C*08 alleles, i.e. **C*08:01 to C*08:159**, recognized by the HLA Nomenclature Committee in January 2018[1] will be amplified by the primers in the HLA-C*08 SSP kit[2].

The HLA-C*08 kit enables separation of the confirmed HLA-C*08 alleles as listed in the IMGT/HLA database 3.26.0. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA-C*08 alleles is listed below.

The HLA-C*08 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles.

Lot No.: 4G7 **Lot-specific information**

The following HLA-C*08 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
C*08:20, 08:99	30	C*08:36N, 08:78	23
C*08:24, 08:88N	9	C*08:69, 08:70Q	23
C*08:30, 08:32	19		

[1]HLA-C alleles listed on the IMGT/HLA web page 2018-January-19, release 3.31.0, www.ebi.ac.uk/imgt/hla.
[2]Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page http://hla.alleles.org/alleles/deleted.html.

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Lot No.: 4G7 **Lot-specific information**

ALLELE CONFIRMATION STATUS

Allele	Status[1]	Allele	Status[1]	Allele	Status[1]	Allele	Status[1]
C*08:01:01	**Confirmed**	C*08:13	Unconfirmed	C*08:59	Unconfirmed	C*08:109	Unconfirmed
C*08:01:02	**Confirmed**	C*08:14	Unconfirmed	C*08:60	Unconfirmed	C*08:110	Unconfirmed
C*08:01:03	Unconfirmed	**C*08:15:01**	**Confirmed**	C*08:61	Unconfirmed	C*08:111	Unconfirmed
C*08:01:04	Unconfirmed	**C*08:15:02**	**Confirmed**	C*08:62	Unconfirmed	**C*08:112**	**Confirmed**
C*08:01:05	Unconfirmed	C*08:16:01	Unconfirmed	C*08:63	Unconfirmed	C*08:113	Unconfirmed
C*08:01:06	Unconfirmed	C*08:16:02	Unconfirmed	C*08:65	Unconfirmed	C*08:114	Unconfirmed
C*08:01:07	**Confirmed**	C*08:17	Unconfirmed	**C*08:66**	**Confirmed**	**C*08:115**	**Confirmed**
C*08:01:08	Unconfirmed	C*08:18	Unconfirmed	C*08:67	Unconfirmed	C*08:116	Unconfirmed
C*08:01:09	**Confirmed**	C*08:19	Unconfirmed	C*08:68	Unconfirmed	C*08:117	Unconfirmed
C*08:01:10	**Confirmed**	**C*08:20**	**Confirmed**	**C*08:69**	**Confirmed**	C*08:118	Unconfirmed
C*08:01:11	Unconfirmed	**C*08:21**	**Confirmed**	C*08:70Q	Unconfirmed	C*08:119	Unconfirmed
C*08:01:12	Unconfirmed	**C*08:22**	**Confirmed**	C*08:71	Unconfirmed	C*08:120	Unconfirmed
C*08:01:13	Unconfirmed	**C*08:23**	**Confirmed**	C*08:72:01	Unconfirmed	C*08:121N	Unconfirmed
C*08:01:14	Unconfirmed	C*08:24	Unconfirmed	**C*08:72:02**	**Confirmed**	C*08:122	Unconfirmed
C*08:01:15	Unconfirmed	C*08:25	Unconfirmed	**C*08:73**	**Confirmed**	C*08:123	Unconfirmed
C*08:01:16	Unconfirmed	C*08:26N	Unconfirmed	**C*08:74**	**Confirmed**	C*08:124	Unconfirmed
C*08:01:17	Unconfirmed	**C*08:27**	**Confirmed**	C*08:75	Unconfirmed	C*08:125	Unconfirmed
C*08:01:18	Unconfirmed	**C*08:28**	**Confirmed**	C*08:76	Unconfirmed	C*08:126	Unconfirmed
C*08:01:19	Unconfirmed	**C*08:29**	**Confirmed**	C*08:77	Unconfirmed	C*08:127N	Unconfirmed
C*08:02:01:01	**Confirmed**	**C*08:30**	**Confirmed**	C*08:78	Unconfirmed	C*08:128	Unconfirmed
C*08:02:01:02	**Confirmed**	C*08:31	Unconfirmed	C*08:79	Unconfirmed	C*08:129N	Unconfirmed
C*08:02:02	**Confirmed**	**C*08:32**	**Confirmed**	C*08:80	Unconfirmed	C*08:130N	Unconfirmed
C*08:02:03	Unconfirmed	C*08:33:01	Unconfirmed	C*08:81	Unconfirmed	C*08:131	Unconfirmed
C*08:02:04	**Confirmed**	C*08:33:02	Unconfirmed	C*08:82	Unconfirmed	C*08:132	Unconfirmed
C*08:02:05	Unconfirmed	C*08:33:03	Unconfirmed	C*08:83	Unconfirmed	C*08:133	Unconfirmed
C*08:02:06	Unconfirmed	**C*08:34**	**Confirmed**	C*08:84	Unconfirmed	C*08:134	Unconfirmed
C*08:02:07	**Confirmed**	C*08:35	Unconfirmed	C*08:85	Unconfirmed	C*08:135	Unconfirmed
C*08:02:08	**Confirmed**	C*08:36N	Unconfirmed	C*08:86	Unconfirmed	C*08:136	Unconfirmed
C*08:02:09	**Confirmed**	**C*08:37**	**Confirmed**	C*08:87	Unconfirmed	C*08:137	Unconfirmed
C*08:02:10	**Confirmed**	C*08:38	Unconfirmed	C*08:88N	Unconfirmed	C*08:138	Unconfirmed
C*08:02:11	**Confirmed**	C*08:39	Unconfirmed	C*08:89N	Unconfirmed	C*08:139	Unconfirmed
C*08:02:12	**Confirmed**	C*08:40	Unconfirmed	**C*08:90**	**Confirmed**	C*08:140	Unconfirmed
C*08:02:13	Unconfirmed	**C*08:41**	**Confirmed**	C*08:91	Unconfirmed	C*08:141Q	Unconfirmed
C*08:02:14	Unconfirmed	C*08:42	Unconfirmed	**C*08:92**	**Confirmed**	C*08:142	Unconfirmed
C*08:03:01	**Confirmed**	**C*08:43**	**Confirmed**	C*08:93	Unconfirmed	C*08:143	Unconfirmed
C*08:03:02	Unconfirmed	C*08:44	Unconfirmed	**C*08:94**	**Confirmed**		
C*08:03:03	Unconfirmed	C*08:45	Unconfirmed	**C*08:95**	**Confirmed**		
C*08:03:04	Unconfirmed	C*08:46	Unconfirmed	C*08:96	Unconfirmed		
C*08:04:01	**Confirmed**	**C*08:47**	**Confirmed**	C*08:97	Unconfirmed		
C*08:04:02	Unconfirmed	C*08:48	Unconfirmed	C*08:98	Unconfirmed		
C*08:04:03	Unconfirmed	C*08:49	Unconfirmed	C*08:99	Unconfirmed		
C*08:05	**Confirmed**	C*08:50	Unconfirmed	C*08:100	Unconfirmed		
C*08:06	**Confirmed**	C*08:51	Unconfirmed	C*08:101	Unconfirmed		
C*08:07	Unconfirmed	C*08:52N	Unconfirmed	C*08:102	Unconfirmed		
C*08:08:01	Unconfirmed	**C*08:53**	**Confirmed**	**C*08:103**	**Confirmed**		
C*08:08:02	Unconfirmed	C*08:54	Unconfirmed	C*08:104	Unconfirmed		
C*08:09	Unconfirmed	C*08:55N	Unconfirmed	C*08:105	Unconfirmed		
C*08:10	**Confirmed**	**C*08:56**	**Confirmed**	C*08:106	Unconfirmed		
C*08:11	**Confirmed**	C*08:57	Unconfirmed	**C*08:107**	**Confirmed**		
C*08:12	**Confirmed**	C*08:58	Unconfirmed	C*08:108	Unconfirmed		

[1]Allele status "confirmed" or "unconfirmed" as listed on the IMGT/HLA web page 2016-October-14, release 3.26.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in HLA-C*08 homo- and heterozygotes is available upon request.

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7

Lot-specific information

SPECIFICITY TABLE

HLA-C*08 SSP subtyping

Specificities and sizes of the PCR products of the 41+1 primer mixes used for HLA-C*08 SSP subtyping

Primer Mix	Size of spec. PCR product[1]	Size of control band[2]	Amplified HLA-C*08 alleles[3]	Other amplified HLA Class I alleles
1	250 bp	**800 bp**	*08:01:01:01-08:01:21, 08:03:01-08:04:03, 08:06, 08:08:01-08:11, 08:13-08:14, 08:16:01-08:16:02, 08:20-08:22, 08:24, 08:26N, 08:36N, 08:38-08:42, 08:44, 08:46, 08:50, 08:54, 08:56-08:61, 08:65-08:66, 08:72:01-08:72:02, 08:78-08:89N, 08:91, 08:93, 08:95-08:99, 08:101-08:102, 08:104-08:106, 08:109, 08:113, 08:117, 08:119, 08:121N-08:122, 08:124, 08:127N-08:131, 08:133, 08:135-08:139, 08:141Q, 08:143-08:145, 08:147-08:148, 08:153-08:155, 08:157	*01:22, 01:35, 01:131, 02:03, 02:16:01-02:16:02, 02:18, 04:04:01:01-04:04:02, 04:06:01-04:06:02, 04:13, 04:34, 04:58, 04:122, 04:160, 04:178, 04:212, 04:265, 05:11, 05:17, 05:27, 05:68, 05:79, 05:115, 05:134, 05:151, 06:04:01-06:04:02, 06:118, 06:153, 06:197, 12:14:01-12:14:02, 12:18:01-12:18:02, 12:20, 12:83, 12:169, 12:175, 12:181, 14:06, 14:15, 14:53, 14:77, 14:87, 15:02:01:01-15:07, 15:09-15:13:01:02, 15:15-15:19, 15:21-15:24, 15:26-15:50, 15:52-15:73, 15:76-15:83, 15:85-15:101, 15:103-15:142, 15:144-15:147, 15:149-15:151, 16:35, 16:40, 16:48, 16:110, 17:01:01:02-17:16, 17:18-17:38, **B*58:02:01**
2[4]	115 bp	1070 bp	*08:01:01:01-08:01:21, 08:03:01-08:03:04, 08:06, 08:08:01-08:11, 08:14, 08:16:01-08:16:02, 08:20-08:22, 08:24, 08:26N, 08:36N, 08:38, 08:40-08:42, 08:44, 08:46, 08:50, 08:56, 08:58-08:61, 08:78-08:89N, 08:91, 08:95-08:99, 08:101-08:102, 08:105-08:106, 08:109, 08:117-08:119, 08:121N-08:122, 08:124, 08:127N-08:131, 08:133, 08:136-08:137, 08:141Q, 08:143-08:145, 08:147-08:148, 08:153-08:155, 08:157	*05:79
3[4]	115 bp	**800 bp**	*08:02:01:01-08:02:15, 08:04:01-08:05, 08:07, 08:12-08:13, 08:17-08:19:02, 08:23, 08:25, 08:27-08:35, 08:37, 08:43, 08:45, 08:48-08:49, 08:52N-08:55N, 08:62, 08:66-08:71, 08:73-08:76, 08:90, 08:92-08:94, 08:100, 08:103-08:104, 08:107-08:108, 08:110-08:116, 08:120,	*03:251, 03:314, 04:120, 05:01:01:01-05:01:36, 05:03-05:08, 05:10-05:11, 05:13-05:16, 05:18:01-05:51Q, 05:53-05:61, 05:63-05:67, 05:69-05:75, 05:77-05:78:02, 05:80-05:87, 05:89-05:114, 05:116, 05:118-05:132, 05:135-05:142, 05:144-05:150, 05:152-05:157, 06:129, 07:41, 07:447, 15:130**, B*14:32, B*15:337**

			08:123, 08:125-08:126, 08:132, 08:134, 08:138-08:140, 08:142, 08:146, 08:150-08:152, 08:156, 08:158-08:159	
4[4,6]	110 bp	1070 bp	*08:03:01-08:03:04, 08:06, 08:14, 08:38, 08:40, 08:61, 08:101, 08:117, 08:144	*05:79
5	160 bp	1070 bp	*08:05, 08:15:01-08:15:02, 08:21, 08:51, 08:73, 08:137	*01:13, 02:51, 03:87:01-03:87:02, 04:129, 04:223:01-04:223:02, 05:09:01-05:09:03, 05:17, 05:42, 05:46, 05:52, 06:67, 07:101, 07:130, 07:148, 07:161, 07:583, 12:127, 12:144, 12:185, 12:203, 16:27, 17:05, **B*15:33, B*15:248**
6[4,7]	65 bp	**800 bp**	*08:102	* 07:06:01:01-07:06:01:02, 07:18-07:19, 07:330:02, 07:517, 07:607
	100 bp		*08:14, 08:80, 08:103	*01:02:34, 01:21, 02:42, 02:107, 04:140, 04:166, 04:220, 05:98, 06:05, 07:02:09, 12:16, 12:147, 15:63, 15:113, 16:80, **B*67:02**
	270 bp		*08:06	*01:140, 06:161, 16:33
	310 bp		*08:23	
7[4]	100 bp	1070 bp	*08:07, 08:47, 08:104	*05:23, 05:62, 05:134, 05:143, 05:151, 07:01:48, 07:02:35, **B*48:04:02**
	150 bp		*08:41, 08:115, 08:138	***03:87:01, 03:267, 05:27, 05:39, 05:151, **B*15:01:03**
	230 bp		*08:87	
8	240 bp	1070 bp	*08:112	
9	140 bp	1070 bp	*08:88N	
	375 bp		*08:24, 08:75	*02:83, 16:90, 16:100
	505 bp		*08:10	*05:79
10[4]	110 bp	**800 bp**	*08:09	
	140 bp		*08:17	
11[5]	185 bp	**800 bp**	*08:128	*03:206, 03:212, 04:84
	225 bp		*08:09, 08:11, 08:59, 08:113, 08:152	* 05:04:01-05:04:02, 05:103:01-05:103:02, 05:135, 06:129, 07:68, 07:260:01-07:260:02, 07:302, **B*15:337, B*18:83, B*58:76**
	255 bp		*08:86	
	280 bp		*08:12	***05:16, 05:85, 05:107, 06:129, 07:364, **B*14:32**
12	165 bp	**800 bp**	*08:01:01:01-08:09, 08:11-08:12, 08:14-08:15:02, 08:17, 08:19:01-08:24, 08:26N-08:54, 08:56-08:63, 08:65-08:93, 08:95-08:159	*01:43, 02:87, 03:280, 07:101, 07:148, 07:161, 07:583, 12:127, 12:203
13[4]	105 bp	**800 bp**	*08:02:01:01-08:02:15, 08:05, 08:07, 08:12, 08:17-08:19:02, 08:23, 08:25, 08:28, 08:30, 08:32-08:35, 08:37, 08:43, 08:45, 08:47-08:48, 08:52N-08:53, 08:55N, 08:62-08:63,	*03:251, 04:120, 05:01:01:01-05:01:36, 05:03-05:07N, 05:10, 05:12-05:16, 05:18:01-05:26, 05:28-05:51Q, 05:53-05:61, 05:63-05:67, 05:69, 05:71-05:78:02, 05:80-05:88, 05:90-05:105, 05:107-05:111, 05:113N-05:114, 05:116-05:132,

Lot No.: 4G7 **Lot-specific information**

			08:67-08:71, 08:73-08:77, 08:90, 08:92, 08:94, 08:100, 08:103, 08:107-08:108, 08:110-08:112, 08:114-08:116, 08:118, 08:120, 08:123, 08:125-08:126, 08:132, 08:134, 08:140, 08:146, 08:149-08:152, 08:156, 08:158-08:159	05:135-05:142, 05:144-05:145, 05:147-05:150, 05:152-05:157, 07:41
14	130 bp 160 bp 280 bp	1070 bp	*08:90 *08:18, 08:95 *08:08:01-08:08:02	 *03:155, 03:282, 07:413, 07:422, 12:149, **B*35:252, B*35:339, B*39:114, B*40:346**
15[5]	265 bp	1070 bp	*08:13, 08:16:01-08:16:02, 08:25, 08:94	*05:29:01-05:29:02
16[6]	545 bp	1070 bp	*08:22, 08:56, 08;154	*01:85, 04:277, 15:29, 15:87
17	375 bp 430 bp	1070 bp	*08:05, 08:21, 08:25, 08:137 *08:28, 08:137	*05:42[w], 05:46 *05:25, 05:42
18[4]	80 bp 200 bp	1070 bp	*08:31 *08:26N, 08:92	*05:105
19[4]	110 bp 250 bp	**800 bp**	*08:27, 08:29-08:31 *08:32	*05:08, 05:89, 05:106:01-05:106:02, 06:129, 07:447
20[4]	105 bp	1070 bp	*08:35, 08:43, 08:54	*05:44:01, **B*15:298**
21[5]	195 bp	1070 bp	*08:01:01:01-08:01:21, 08:03:01-08:03:04, 08:06, 08:08:01-08:11, 08:14, 08:16:01-08:16:02, 08:20-08:22, 08:24, 08:26N-08:27, 08:33:02-08:33:03, 08:35-08:36N, 08:38-08:42, 08:44, 08:46, 08:50, 08:54, 08:56, 08:58-08:61, 08:65-08:66, 08:72:01-08:72:02, 08:78-08:89N, 08:91, 08:95-08:99, 08:101-08:102, 08:105-08:106, 08:109, 08:117-08:119, 08:121N-08:122, 08:124, 08:127N-08:131, 08:133, 08:135-08:138, 08:141Q, 08:143-08:145, 08:147-08:148, 08:153-08:155, 08:157	*01:02:06, 01:04, 01:21, 01:97, 01:131, 02:02:05, 02:02:13, 02:05:01, 02:06:01, 02:10:01:01-02:10:02, 02:12, 02:14:01-02:14:02, 02:16:01, 02:17, 02:27:02, 02:33, 02:36:02, 02:40:02, 02:43:02, 02:55:02, 02:58, 02:73, 02:76, 02:89, 02:94-02:95, 02:109-02:110, 02:125, 02:133, 04:01:01:01-04:01:06, 04:01:09-04:01:84, 04:03:01-04:20, 04:23-04:159, 04:161-04:162, 04:164-04:222, 04:224-04:240, 04:242-04:286, 05:12, 05:18:01, 05:103:02, 05:106:02, 06:02:01:01-06:02:01:10, 06:02:03-06:02:26, 06:02:28-06:15, 06:17-06:40, 06:42:01-06:61, 06:63-06:91, 06:93-06:111, 06:113-06:203, 06:205, 06:207-06:210, 06:212, 12:02:01-12:03:15, 12:03:18-12:03:26, 12:03:28-12:03:29, 12:03:31-12:13, 12:14:02-12:31, 12:33-12:143, 12:145-12:180, 12:182-12:184, 12:186-12:221, 14:02:01:01-14:02:04, 14:02:06-14:16, 14:18-14:90, 15:02:01:01-15:02:04, 15:02:06-15:02:12, 15:02:14-15:05:05, 15:05:07-15:06:02, 15:07-15:13:01:02, 15:15-15:19, 15:21-15:64, 15:66-15:101, 15:103-15:151, 16:01:01:01-16:01:20,

				16:01:22-16:02:02, 16:02:04-16:02:14, 16:04:01:01-16:04:01:02, 16:04:03-16:04:05, 16:06-16:26, 16:28-16:104, 16:106-16:116, 17:01:01:02-17:01:10, 17:01:12-17:05, 17:07-17:33, 17:35-17:38, 18:01-18:10
22[4]	80 bp	1070 bp	*08:41, 08:115, 08:138	*03:314, 05:27, 05:39, 05:151, **B*15:337, B*44:148**
	155 bp		*08:33:01	*05:18:02-05:18:03, 05:103:01, 05:107, 05:115, 05:134, 05:151, 07:04:01:01-07:04:10, 07:11-07:12, 07:63, 07:68, 07:101, 07:139, 07:142, 07:181, 07:199:01-07:199:02, 07:260:01-07:260:02, 07:272, 07:302, 07:323-07:324, 07:328-07:329N, 07:336, 07:338, 07:354-07:355, 07:357-07:358, 07:361, 07:364-07:365, 07:378, 07:394-07:395, 07:403, 07:406, 07:420, 07:426, 07:428, 07:459, 07:466-07:467, 07:480, 07:487, 07:501, 07:523, 07:534-07:535, 07:552, 07:562-07:563, 07:569, 07:585-07:586, 07:600:01N-07:600:02N, **B*14:32, B*18:83, B*44:148, B*58:76**
23[4,7]	90 bp	1070 bp	*08:36N, 08:69	*03:174, 03:365, 07:229, 07:387, 12:131, 14:39, 16:42, 16:56, **B*07:243, B*08:98, B*35:202**
	140 bp		*08:92, 08:95	***03:155, B*35:252, B*39:114**
	205 bp		*08:70Q	
	250 bp		*08:74, 08:78	*01:125, 03:236, 03:351, 04:106, 07:293, 07:519**, B*18:64, B*35:183, B*40:138**
24[4]	105 bp	1070 bp	*08:56, 08:89N	*04:179
	150 bp		*08:37, 08:53, 08:74	*02:14:01-02:14:02, 02:107, 04:42:01-04:42:02, 04:220, 04:239, 05:43, 06:05, 07:02:09, 12:16, 12:147, 12:195:02, 12:217, 15:23, 15:63, 15:138, 16:21, 16:80
25[4]	115 bp	1070 bp	*08:39	*05:12, 05:151, 07:487**, A*29:10:01-29:10:02, B*18:83, B*44:148, B*58:76**
	225 bp		*08:09, 08:11, 08:59, 08:113, 08:152	***05:04:01-05:04:02, 05:103:01-05:103:02, 05:135, 06:129, 07:68, 07:260:01-07:260:02, 07:302, B*15:337, B*18:83, B*58:76**
	265 bp		*08:62, 08:82, 08:144	*03:251, 03:314, 05:05:01-05:05:02, 05:135, 05:147-05:148**, A*02:425, A*02:519, A*29:10:01-29:10:02, A*68:69, B*14:32, B*15:337, B*18:83, B*44:148**
	290 bp		*08:34	
26[4]	100 bp	1070 bp	*08:14, 08:80, 08:103	*01:02:34, 01:21, 02:42, 02:107, 04:140, 04:166, 04:220, 05:98,

				06:05, 07:02:09, 12:16, 12:147, 15:63, 15:113, 16:80, **B*67:02**
27[4]	125 bp	1070 bp	*08:19:01-08:19:02, 08:101, 08:143	*04:223:01, 05:64:01-05:64:02
	265 bp		*08:55N	*05:92N
28	155 bp	1070 bp	*08:53	
	185 bp		*08:01:07, 08:02:07, 08:33:02	*03:251, 03:314, 04:120, 05:148
	290 bp		*08:34	
29	185 bp	1070 bp	*08:128	*03:206, 03:212, 04:84
	210 bp		*08:38, 08:52N	
30[4]	65 bp	1070 bp	*08:99	
	270 bp		*08:110	
	405 bp		*08:28, 08:137	*04:223:01, 05:25, 05:42, 07:01:48, 07:02:35, 07:41, **A*01:01:06**
	470 bp		*08:20, 08:40	*03:171, 03:211:01, 04:144, 05:93, 06:73, 12:109
31	500 bp	1070 bp	*08:02:06, 08:19:01, 08:62, 08:144	*04:129, 05:01:20, 05:64:01, **A*32:72**
32	285 bp	1070 bp	*08:44, 08:61, 08:82, 08:126	*03:251, 03:314, 05:10, 05:148, 15:130, **B*44:148, B*58:76**
33	155 bp	1070 bp	*08:15:01-08:15:02, 08:51	*01:13, 02:51, 03:87:01-03:87:02, 04:223:01-04:223:02, 05:09:01-05:09:03, 05:17, 05:52, 07:130, 12:144, 12:185, 16:27, **B*15:33, B*15:248**
34	215 bp	1070 bp	*08:01:01:01-08:01:20, 08:02:01:01-08:09, 08:11-08:63, 08:65-08:72:02, 08:74-08:159	*01:02:01:01-01:02:40, 01:02:42-01:13, 01:15:01-01:18, 01:20-01:58, 01:60, 01:63:02-01:94, 01:96-01:117N, 01:119-01:148, 02:12[w], 02:27:01[w]-02:27:02[w], 02:87, 02:115[w], 02:126[w], 03:03:12, 03:03:15, 03:04:49, 03:11:01, 03:18:01, 03:37:02, 03:39, 03:64:02, 03:94, 03:99:01-03:99:02, 03:308[w], 03:344, 06:11, 06:122, 06:124, 07:01:01:01-07:01:22, 07:01:24-07:01:40, 07:01:42-07:02:10, 07:02:12-07:02:32, 07:02:34-07:02:83, 07:04:01:01-07:04:04, 07:04:06-07:06:01:02, 07:08, 07:10-07:19, 07:21-07:33N, 07:35, 07:37-07:48, 07:50-07:58, 07:60-07:63, 07:65-07:75, 07:77-07:87, 07:89-07:95, 07:96:02-07:123, 07:125-07:126, 07:128-07:154, 07:156-07:172:01, 07:173-07:209, 07:211-07:226, 07:228-07:237, 07:239-07:246:02, 07:248-07:262, 07:264N-07:294, 07:296-07:314:02, 07:316-07:326, 07:329N-07:354, 07:356, 07:358-07:376, 07:379-07:389, 07:391-07:401, 07:404-07:405, 07:407-07:437N, 07:439-07:441:01, 07:442-07:547, 07:548[w], 07:549-07:560, 07:561[w], 07:562-07:577, 07:579, 07:581-07:597, 07:599-07:610,

				12:02:01-12:03:12, 12:03:14-12:03:24, 12:03:26-12:03:43, 12:06, 12:08, 12:10:01-12:11, 12:13-12:20, 12:22-12:32, 12:34-12:40, 12:42Q-12:53, 12:56-12:59, 12:61-12:137, 12:139-12:145, 12:147-12:187, 12:189-12:221, 15:07, 15:21, 15:25, 15:116, 15:144, 16:01:01:01-16:01:22, 16:04:01:01-16:04:01:02, 16:04:03-16:04:05, 16:06-16:08, 16:10-16:11, 16:13-16:18, 16:20-16:24, 16:26-16:33, 16:34[w], 16:35-16:38, 16:40-16:45, 16:49-16:56, 16:58-16:59, 16:61-16:62, 16:64-16:68, 16:71-16:73, 16:75-16:76, 16:78-16:83, 16:86-16:87, 16:92-16:98, 16:100, 16:105, 16:109-16:114, 16:116, 17:22
35[4]	115 bp	1070 bp	*08:72:01-08:72:02	*03:230, 03:234, 12:169, 14:87, **B*15:88, B*15:200**
36[4]	115 bp	1070 bp	*08:121N	**B*15:246N**
37	205 bp 265 bp	1070 bp	*08:127N *08:141Q	
38	205 bp 265 bp	1070 bp	*08:129N *08:141Q	
39	350 bp	1070 bp	*08:130N	
40[4]	125 bp 200 bp	1070 bp	*08:42 *08:107	*04:229
41[4]	110 bp	1070 bp	*08:01:01:01-08:01:21, 08:08:01-08:08:02, 08:10-08:11, 08:16:01-08:16:02, 08:20-08:22, 08:24, 08:26N, 08:36N, 08:41-08:42, 08:44, 08:46, 08:50, 08:56, 08:58-08:60, 08:78-08:89N, 08:91, 08:95-08:99, 08:102, 08:105-08:106, 08:109, 08:118-08:119, 08:121N-08:122, 08:124, 08:127N-08:131, 08:133, 08:136-08:137, 08:141Q, 08:143, 08:145, 08:147-08:148, 08:153-08:155, 08:157	
42[8]	-	-	**Negative Control**	

[1]Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of HLA-C*08 SSP subtypings.
When the primers in a primer mix can give rise to HLA-specific PCR products of more than one length this is indicated if the size difference is more than 20 base pairs. Size differences of 20 base pairs or less are not given. For high resolution SSP kits, the alleles listed are specified according to amplicon length.
Nonspecific amplifications, i.e. a ladder or a smear of bands, may sometimes be seen. GC-rich primers have a higher tendency of giving rise to nonspecific amplifications than other primers.
PCR fragments longer than the control bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.
PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherit feature of the primer pair(s) of a primer mix. More often it is due to other factors such as too low amount of DNA in the PCR reactions, taking too long time in setting up the PCR reactions, working at elevated room temperature or using thermal cyclers that are not pre-heated.

[2]The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

[3]For several HLA Class I alleles 1st and/or 4th exon(s) and beyond, as well as intron nucleotide sequences, are not available. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

[4]HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

[5]Primer mixes 11, 15 and 21 may have tendencies of unspecific amplifications.

[6]Primer mix 4 and 16 may give rise to a lower yield of HLA-specific PCR product than the other HLA-C*08 primer mixes, most pronounced in primer mix 4.

[7]Primer mixes 6 and 23 have a tendency of giving rise to primer oligomer formation.

[8]Primer mix 42 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.

'w', might be weakly amplified.

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7

Lot-specific information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	250	115	115	110	160	65	100	240	140	110	185	165
PCR product						100	150		375	140	225	
						270	230		505		255	
						310					280	
Length of int.	800	1070	800	1070	1070	800	1070	1070	1070	800	800	800
pos. control[1]												
5'-primer(s)[2]	2nd I	527	527	527	176	142	453	404	312	176	361	176
	5' -CCA 3'	5' -TAC 3'	5' -TgA 3'	5' -TAC 3'	5' -gCA 3'	5' -TCT 3'	5' -AAT 3'	5' -CCA 3'	5' -AAA 3'	5' -gCA 3'	5' -AgT 3'	5' -gCA 3'
					485	2nd I	658		429	527	419	
					5' -CAA 3'	5' -CCA 3'	5' -CTA 3'		5' -.Ag 3'	5' -TAC 3'	5' -gTC 3'	
						1018			736		634	
						5' -gTg 3'			5' -gCA 3'		5' -CAA 3'	
									757		704	
									5' -CCA 3'		5' -TgT 3'	
3'-primer(s)[3]	539	601	601	595	289	201	512	601	526	277	601	302
	5' -TCA 3'	5' -CTT 3'	5' -CTT 3'	5' -CCT 3'	5' -AgC 3'	5' -CTT 3'	5' -CCA 3'	5' -CTT 3'	5' -CgT 3'	5' -gCA 3'	5' -CTT 3'	5' -ggC 3'
					289	559	560		956	598	846	
					5' -AgC 3'	5' -CgC 3'	5' -ACA 3'		5' -CAg 3'	5' -CTC 3'	5' -CAC 3'	
					299	599	846					
					5' -TCT 3'	5' -TCC 3'	5' -CAC 3'					
					601	1043						
					5' -CTC 3'	5' -CAA 3'						
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec.	105	130	265	545	375	80	110	105	195	80	90	105
PCR product		160			430	200	250			155	140	150
		280									205	
											250	
Length of int.	800	1070	1070	1070	1070	1070	800	1070	1070	1070	1070	1070
pos. control[1]												
5'-primer(s)[2]	539	173	1st I	972	1st I	441	391	527	2nd I	486	85	85
	5' -gCg 3'	5' -CgC 3'	5' -CgA 3'	5' -CTA 3'	5' -CgA 3'	5' -TAg 3'	5' -ACT 3'	5' -TgA 3'	5' -CCA 3'	5' -ACC 3'	5' -CCg 3'	5' -CCg 3'
		194				443	520			560	194	88
		5' -CgT 3'				5' -CAA 3'	5' -CgC 3'			5' -CCT 3'	5' -CgT 3'	5' -Tgg 3'
		215				560	539				246	97
		5' -gCA 3'				5' -CgA 3'	5' -gTg 3'				5' -CAg 3'	5' -TCg 3'
		363									257	134
		5' -AgC 3'									5' -CCA 3'	5' -CCg 3'
											374	527
											5' -CTA 3'	5' -TAC 3'
											443	
											5' -CAA 3'	
											3rd I	
											5' -Cgg 3'	
3'-primer(s)[3]	601	302	175	1034	289	601	601	584	485	601	302	201
	5' -CTT 3'	5' -ggC 3'	5' -CCg 3'	5' -AgT 3'	5' -AgC 3'	5' -CTT 3'	5' -CTT 3'	5' -ggC 3'	5' -CCg 3'	5' -CTT 3'	5' -ggC 3'	5' -CTT 3'
		601	175		341			595			538	587
		5' -CTT 3'	5' -CCT 3'		5' -CgT 3'			5' -CCT 3'			5' -CCg 3'	5' -CCg 3'
											787	
											5' -TCT 3'	
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec.	115	100	125	155	185	65	500	285	155	215	115	115
PCR product	225		265	185	210	270						
	265			290		405						
	290					470						
Length of int. pos. control[1]	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070	1070
5'-primer(s)[2]	351	142	1st I	88	368	341	176	355	485	126	527	268
	5' -CAA 3'	5' -TCT 3'	5' -CgA 3'	5' -Tgg 3'	5' -gTC 3'	5' -ggA 3'	5' -gCA 3'	5' -TCA 3'	5' -CAA 3'	5' -ggA 3'	5' -TAC 3'	5' -.gA 3'
	379		368	351	679	652						
	5' -ACg 3'		5' -gTT 3'	5' -CAA 3'	5' -g.T 3'	5' -CCA 3'						
	419			459	704	851						
	5' -gTC 3'			5' -gAT 3'	5' -TgT 3'	5' -CCT 3'						
	527					934						
	5' -TgT 3'					5' -TCA 3'						
3'-primer(s)[3]	601	201	175	201	526	453	387	601	601	299	601	341
	5' -CTT 3'	5' -CTT 3'	5' -CTA 3'	5' -CTT 3'	5' -CgT 3'	5' -TCA 3'	5' -TCC 3'	5' -CTT 3'	5' -CTC 3'	5' -TCA 3'	5' -CTC 3'	5' -Cgg 3'
			453	601	846	956						
			5' -TCA 3'	5' -CTT 3'	5' -CAC 3'	5' -CAg 3'						
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41
Length of spec.	205	205	350	125	110
PCR product	265	265		200	
Length of int. pos. control[1]	1070	1070	1070	1070	1070
5'-primer(s)[2]	375	375	28	2nd I	527
	5' -Tgg 3'	5' -Tgg 3'	5' -TCA 3'	5' -CCA 3'	5' -TAC 3'
	437	438			
	5' -ggA 3'	5' -gAT 3'			
3'-primer(s)[3]	601	601	208	412	595
	5' -CTT 3'	5' -CTT 3'	5' -CTA 3'	5' -CTT 3'	5' -gCC 3'
				487	595
				5' -Cgg 3'	5' -CCC 3'
Well No.	37	38	39	40	41

[1]The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

[2]The nucleotide position matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

[3]The nucleotide position matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*08 SSP primer set[3]

					Well[2]															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				Prod. No.:	201554301	201554302	201554303	201554304	201779005	201554306	201554307	201554308	201554309	201554310	201779011	201554312	201554313	201554314	201554315	201892816
	IHWC cell line[1]		C*																	
1	9001	SA	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*05:01		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-
8	9007	DEM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-
26	9285	WT49	*07:18		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:29	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
28	9320	BEL5GB	*05:01	*16:01	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-
29	9050	MOU	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-
32	9297	HAG	*17:03		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	-	+	-	-	-	-	-	-	-	-	+	+	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	+	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*08 SSP primer set[3]

					Well[2]															
					17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
				Prod. No.:	201554317	201554318	201554319	201554320	201554321	201554322	201554323	201554324	201554325	201779026	201554327	201779028	201779029	201554330	201554331	201779032
	IHWC cell line[1]		C*																	
1	9001	SA	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*12:02		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9007	DEM	*04:01		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*07:18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:29	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*05:01	*16:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*16:01		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*01:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*12:03		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

CELL LINE VALIDATION SHEET

HLA-C*08 SSP primer set[3]

					Well[2]								
					33	34	35	36	37	38	39	40	41
				Prod. No.:	201779033	201779034	201892835	201779036	201779037	201779038	201779039	201779040	201892841
	IHWC cell line[1]		C*										
1	9001	SA	*07:02		-	+	-	-	-	-	-	-	-
2	9280	LK707	*07:01	*15:05	-	+	-	-	-	-	-	-	-
3	9011	E4181324	*12:02		-	+	-	-	-	-	-	-	-
4	9275	GU373	*03:04	*04:01	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*06:02		-	-	-	-	-	-	-	-	-
6	9353	SM	*03:04	*07:02	-	+	-	-	-	-	-	-	-
7	9020	QBL	*05:01		-	-	-	-	-	-	-	-	-
8	9007	DEM	*04:01		-	-	-	-	-	-	-	-	-
9	9026	YAR	*12:03		-	+	-	-	-	-	-	-	-
10	9107	LKT3	*01:02		-	+	-	-	-	-	-	-	-
11	9051	PITOUT	*16:01		-	+	-	-	-	-	-	-	-
12	9052	DBB	*06:02		-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:02		-	+	-	-	-	-	-	-	-
14	9071	OLGA	*01:02	*03:04	-	+	-	-	-	-	-	-	-
15	9075	DKB	*03:04		-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*02:02		-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:03	*07:01	-	+	-	-	-	-	-	-	-
18	9257	32367	*01:02	*07:05	-	+	-	-	-	-	-	-	-
19	9038	BM16	*07:01		-	+	-	-	-	-	-	-	-
20	9059	SLE005	*03:04		-	-	-	-	-	-	-	-	-
21	9064	AMALA	*03:03		-	-	-	-	-	-	-	-	-
22	9056	KOSE	*12:03		-	+	-	-	-	-	-	-	-
23	9124	IHL	*01:02	*15:02	-	+	-	-	-	-	-	-	-
24	9035	JBUSH	*12:03		-	+	-	-	-	-	-	-	-
25	9049	IBW9	*08:02		-	+	-	-	-	-	-	-	-
26	9285	WT49	*07:18		-	+	-	-	-	-	-	-	-
27	9191	CH1007	*07:04	*15:29	-	+	-	-	-	-	-	-	-
28	9320	BEL5GB	*05:01	*16:01	-	+	-	-	-	-	-	-	-
29	9050	MOU	*16:01		-	+	-	-	-	-	-	-	-
30	9021	RSH	*17:01		-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*05:01		-	-	-	-	-	-	-	-	-
32	9297	HAG	*17:03		-	-	-	-	-	-	-	-	-
33	9098	MT14B	*03:04		-	-	-	-	-	-	-	-	-
34	9104	DHIF	*12:03		-	+	-	-	-	-	-	-	-
35	9302	SSTO	*05:01		-	-	-	-	-	-	-	-	-
36	9024	KT17	*03:03	*04:01	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02		-	+	-	-	-	-	-	-	-
38	9099	LZL	*03:03		-	-	-	-	-	-	-	-	-
39	9315	CML	*02:02	*07:01	-	+	-	-	-	-	-	-	-
40	9134	WHONP199	*01:02	*06:02	-	+	-	-	-	-	-	-	-
41	9055	H0301	*08:02		-	+	-	-	-	-	-	-	-
42	9066	TAB089	*01:02		-	+	-	-	-	-	-	-	-
43	9076	T7526	*01:02	*08:01	-	+	-	-	-	-	-	-	+
44	9057	TEM	*12:03		-	+	-	-	-	-	-	-	-
45	9239	SHJO	*06:02	*17:01	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02		-	+	-	-	-	-	-	-	-
47	9045	TUBO	*07:04	*15:02	-	+	-	-	-	+	-	-	-
48	9303	TER-ND	*04:01	*16:01	-	+	-	-	-	-	-	-	-

101.623-12 – including *Taq* pol., IFU-01
101.623-12u – without *Taq* pol., IFU-02

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Lot No.: 4G7 **Lot-specific information**

[1]The provided cell line HLA specificities are retrieved from the http://www.ihwg.org/hla web site. The specificity of an individual cell line may thus be subject to change.

[2]The C*07:18 allele is amplified by primer mix 6 in the 9285 (WT49) cell line.

[3]The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 5, 7 to 11, 14, 15, 17 to 19, 23 to 33 and 35 to 40 were available.

The specificity of the primers in primer solutions 5, 7, 9, 11, 14, 15, 17 to 19, 23 to 33 and 35 were tested by adding additional 5'-primers respectively 3'-primers. In primer solution 10, 39 and 40 it was only possible to test the 5'-primers, the 3'-primers were not possible to test.

In primer solution 8 and 36 to 38 it was only possible to test the 3'-primer, the 5'-primers were not possible to test. In primer solution 7, 9, 11, 14, 18, 19, 23 to 25 and 28 to 30 one or more 5'-primers were not possible to test. In primer solutions 6, 24, 27, and 41 one or two 3'-primers were not possible to test.

Additional primers in primer solutions 6, 20 and 22 were tested by separately adding either 5'-primers and/or one or two 3'-primers.

Lot No.: 4G7 **Lot-specific information**

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