

101.116-24/03 – including *Taq* pol., IFU-01
101.116-24u/03u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information
Olerup SSP[®] DRB1*13

Product number:	101.116-24/03 – including <i>Taq</i> pol. 101.116-24u/03u – without <i>Taq</i> pol.
Lot number:	51N
Expiry date:	2014-September- 01
Number of tests:	24 tests – Product No. 101.116-24 3 tests – Product No. 101.116-03
Number of wells per test:	43
Storage - pre-aliquoted primers:	dark at -20°C
- PCR Master Mix:	-20°C
- Adhesive PCR seals	RT
- Product Insert	RT

This Product Description is only valid for Lot No. 51N.

**CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[®]
DRB1*13 LOT**

The DRB1*13 specificity and interpretation tables have been updated for the DRB alleles described since the previous *Olerup SSP[®]* DRB1*13 lot was made (**Lot No. 55K**).

The DRB1*13 kit is updated for new alleles to enable separation of:

- Confirmed¹ alleles as listed in the IMGT/HLA database
- Polymorphisms in exons outside of the region encoding the peptide binding domain
- Null and Alternatively expressed alleles

Three well have been added to the DRB1*13 kit, wells **41 to 43**.

The Lot-specific information for DRB1*13 including and without *Taq* polymerase is now described in one common Product Insert.

¹As described in section Uniquely Identified Alleles.

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

Well	5'-primer	3'-primer	rationale
7	-	Modified	Improved specificity of amplification
26	-	Modified	Improved allelic resolution.
30	Modified	-	Improved specificity of amplification
41	New	New	New primer pairs for the DRB1*13:106 and 13:113N alleles.
42	New	New	New primer pairs for the DRB1*13:112 and 13:128 alleles.
43	New	New	New primer pair for the DRB*13:117 allele.

Change in revision R01 compared to R00:

1. The following alleles are not amplified by primer mix 30: DRB1*13:20, 13:24, 13:43, 13:54, 13:71, 13:75, 13:78, 13:111 and 13:114 and the DRB1*04:37, 11:03, 11:36, 11:40, 11:41, 11:55, 11:59, 11:63, 11:76 and 11:85. This has been corrected in the Specificity and Interpretation tables.

Changes in revision R02 compared to R01:

1. Primer mix 2 may give a lower yield of HLA-specific PCR product than the other DRB1*13 primer mixes. This has been corrected in the footnotes to the Specificity Table.
2. Primer mix 11 may faintly amplify the DRB1*11:03, 11:11, 11:40, 11:41, 11:59, 11:63, 11:76 and 11:85 alleles. A footnote has been added to the Specificity Table.

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PRODUCT DESCRIPTION

DRB1*13 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the DRB1*13:01 to DRB1*13:135 alleles.

PLATE LAYOUT

Each test consists of 43 PCR reactions in a 48 well cut PCR plate. Wells 44 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	42	43	empty	empty	empty	empty	empty

The 48 well cut PCR plate is marked with 'DRB1*13' in silver/gray ink.

Well No. 1 is marked with the Lot No '51N'.

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 covered with a PCR-compatible foil.

Please note: When removing each 48 well PCR plate, make sure that the remaining plates stay covered. Use a scalpel or a similar instrument to carefully cut the foil between the plates.

INTERPRETATION

The interpretation of DRB1*13 PCR-SSP subtypings will be influenced by two DRB1*01, the DRB1*03, ten DRB1*04, six DRB1*08, most DRB1*11, the DRB1*12, most DRB1*14, most DRB1*15 and two DRB1*16 alleles, when present on the other haplotype. In addition, the DRB3*01:14 allele will be amplified by primer mixes 1, 9, 13, 18 and 22 to 24, the DRB3*01:08, DRB3*02:06 and DRB3*02:20 alleles will be amplified by primer mix 7 and the DRB3*02:27 allele will be amplified by primer mix 20.

UNIQUELY IDENTIFIED ALLELES

All the DRB1*13 alleles, i.e. **DRB1*13:01 to DRB1*13:135**, recognized by the HLA Nomenclature Committee in January 2012¹ will be amplified by the primers in the DRB1*13 subtyping kit.

The DRB1*13 kit enables separation of the confirmed DRB1*13 alleles as listed in the IMGT/HLA database. 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 DRB1*13 alleles is listed below.

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The DRB1*13 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles

The DRB1*13:92 and 13:98 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

The DRB1*13 subtyping kit cannot the following silent mutations: the DRB1 13:01:01-13:01:02, 13:01:04-13:01:08 and 13:01:10, the DRB1*13:02:01 and 13:02:03-13:02:05, the DRB1*13:03:01-13:03:06, the DRB1*13:05:01-13:05:02, the DRB1*13:07:01-13:07:02, the DRB1*13:11:01-13:11:02, the DRB1*13:12:01-13:12:02, DRB1*13:14:01-13:14:03 alleles, the DRB1*13:21:01-13:21:02, the DRB1*13:23:01-13:23:02, the DRB1*13:33:02-13:33:03 and the DRB1*13:66:01-13:66:02 alleles.

¹DRB1 alleles listed on the IMGT/HLA web page 2012-January-12, release 3.7.0, www.ebi.ac.uk/imgt/hla.

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ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
DRB1*13:01:01	Confirmed	DRB1*13:25	Unconfirmed	DRB1*13:70	Confirmed	DRB1*13:119	Unconfirmed
DRB1*13:01:02	Unconfirmed	DRB1*13:26	Confirmed	DRB1*13:71	Unconfirmed	DRB1*13:120	Unconfirmed
DRB1*13:01:03	Confirmed	DRB1*13:27	Confirmed	DRB1*13:72	Unconfirmed	DRB1*13:121	Unconfirmed
DRB1*13:01:04	Unconfirmed	DRB1*13:28	Unconfirmed	DRB1*13:73	Unconfirmed	DRB1*13:122	Unconfirmed
DRB1*13:01:05	Unconfirmed	DRB1*13:29	Confirmed	DRB1*13:74	Unconfirmed	DRB1*13:123	Unconfirmed
DRB1*13:01:06	Unconfirmed	DRB1*13:30	Unconfirmed	DRB1*13:75	Unconfirmed	DRB1*13:124	Unconfirmed
DRB1*13:01:07	Unconfirmed	DRB1*13:31	Confirmed	DRB1*13:76	Unconfirmed	DRB1*13:125	Unconfirmed
DRB1*13:01:08	Unconfirmed	DRB1*13:32	Unconfirmed	DRB1*13:77	Unconfirmed	DRB1*13:126	Unconfirmed
DRB1*13:01:09	Unconfirmed	DRB1*13:33:01	Unconfirmed	DRB1*13:78	Unconfirmed	DRB1*13:127	Unconfirmed
DRB1*13:01:10	Unconfirmed	DRB1*13:33:02	Unconfirmed	DRB1*13:79	Confirmed	DRB1*13:128	Confirmed
DRB1*13:02:01	Confirmed	DRB1*13:33:03	Confirmed	DRB1*13:80	Unconfirmed	DRB1*13:129	Unconfirmed
DRB1*13:02:02	Confirmed	DRB1*13:34	Unconfirmed	DRB1*13:81	Confirmed	DRB1*13:130	Unconfirmed
DRB1*13:02:03	Unconfirmed	DRB1*13:35	Unconfirmed	DRB1*13:82	Confirmed	DRB1*13:131	Unconfirmed
DRB1*13:02:04	Unconfirmed	DRB1*13:36	Confirmed	DRB1*13:83	Unconfirmed	DRB1*13:132	Unconfirmed
DRB1*13:02:05	Confirmed	DRB1*13:37	Confirmed	DRB1*13:84	Unconfirmed	DRB1*13:133	Unconfirmed
DRB1*13:03:01	Confirmed	DRB1*13:38	Confirmed	DRB1*13:85	Unconfirmed	DRB1*13:134	Confirmed
DRB1*13:03:02	Confirmed	DRB1*13:39	Unconfirmed	DRB1*13:86	Unconfirmed	DRB1*13:135	Unconfirmed
DRB1*13:03:03	Unconfirmed	DRB1*13:40	Confirmed	DRB1*13:87	Confirmed		
DRB1*13:03:04	Confirmed	DRB1*13:41	Confirmed	DRB1*13:88	Unconfirmed		
DRB1*13:03:05	Unconfirmed	DRB1*13:42	Confirmed	DRB1*13:89	Confirmed		
DRB1*13:03:06	Unconfirmed	DRB1*13:43	Unconfirmed	DRB1*13:90	Confirmed		
DRB1*13:04	Confirmed	DRB1*13:44	Unconfirmed	DRB1*13:91	Confirmed		
DRB1*13:05:01	Confirmed	DRB1*13:45	Unconfirmed	DRB1*13:92	Confirmed		
DRB1*13:05:02	Unconfirmed	DRB1*13:46	Unconfirmed	DRB1*13:93	Confirmed		
DRB1*13:06	Confirmed	DRB1*13:47	Unconfirmed	DRB1*13:94	Unconfirmed		
DRB1*13:07:01	Confirmed	DRB1*13:48	Confirmed	DRB1*13:95	Confirmed		
DRB1*13:07:02	Unconfirmed	DRB1*13:49	Confirmed	DRB1*13:96:01	Confirmed		
DRB1*13:08	Confirmed	DRB1*13:50:01	Confirmed	DRB1*13:96:02	Unconfirmed		
DRB1*13:09	Confirmed	DRB1*13:50:02	Unconfirmed	DRB1*13:97	Confirmed		
DRB1*13:10	Confirmed	DRB1*13:51	Unconfirmed	DRB1*13:98	Unconfirmed		
DRB1*13:11:01	Confirmed	DRB1*13:52	Confirmed	DRB1*13:99	Unconfirmed		
DRB1*13:11:02	Confirmed	DRB1*13:53	Unconfirmed	DRB1*13:100	Unconfirmed		
DRB1*13:12:01	Confirmed	DRB1*13:54	Confirmed	DRB1*13:101	Unconfirmed		
DRB1*13:12:02	Unconfirmed	DRB1*13:55	Unconfirmed	DRB1*13:102	Unconfirmed		
DRB1*13:13	Confirmed	DRB1*13:56	Confirmed	DRB1*13:103	Unconfirmed		
DRB1*13:14:01	Confirmed	DRB1*13:57	Unconfirmed	DRB1*13:104	Unconfirmed		
DRB1*13:14:02	Confirmed	DRB1*13:58	Unconfirmed	DRB1*13:105	Unconfirmed		
DRB1*13:14:03	Unconfirmed	DRB1*13:59	Confirmed	DRB1*13:106	Confirmed		
DRB1*13:15	Confirmed	DRB1*13:60	Unconfirmed	DRB1*13:107	Unconfirmed		
DRB1*13:16	Confirmed	DRB1*13:61:01	Unconfirmed	DRB1*13:108	Unconfirmed		
DRB1*13:17	Confirmed	DRB1*13:61:02	Confirmed	DRB1*13:109	Unconfirmed		
DRB1*13:18	Confirmed	DRB1*13:62	Unconfirmed	DRB1*13:110	Unconfirmed		
DRB1*13:19	Confirmed	DRB1*13:63	Unconfirmed	DRB1*13:111	Confirmed		
DRB1*13:20	Confirmed	DRB1*13:64	Unconfirmed	DRB1*13:112	Confirmed		
DRB1*13:21:01	Confirmed	DRB1*13:65	Unconfirmed	DRB1*13:113N	Unconfirmed		
DRB1*13:21:02	Confirmed	DRB1*13:66:01	Unconfirmed	DRB1*13:114	Unconfirmed		
DRB1*13:22	Confirmed	DRB1*13:66:02	Confirmed	DRB1*13:115	Unconfirmed		
DRB1*13:23:01	Unconfirmed	DRB1*13:67	Unconfirmed	DRB1*13:116	Unconfirmed		
DRB1*13:23:02	Unconfirmed	DRB1*13:68	Unconfirmed	DRB1*13:117	Unconfirmed		
DRB1*13:24	Unconfirmed	DRB1*13:69	Unconfirmed	DRB1*13:118	Unconfirmed		

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2012-January-12, release 3.7.0, www.ebi.ac.uk/imgt/hla.

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SPECIFICITY TABLE

DRB1*13 SSP subtyping

Specificities and sizes of the PCR products of the 43 primer mixes used for
 DRB1*13 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified DRB1*13 alleles ³	Other amplified DRB alleles ^{3,4}
1	175 bp	515 bp	*13:01:01-13:16, 13:18-13:42, 13:44, 13:46-13:66:02, 13:68-13:102, 13:104-13:115, 13:117-13:121, 13:123-13:135	*03:01:01:01-03:01:05, 03:01:07-03:01:08, 03:01:10-03:07, 03:09, 03:11:01-03:41, 03:43-03:45, 03:47-03:63, 03:66-03:68N, 03:70-03:77, 08:20, 14:02-14:03:02, 14:05:01-14:06:02, 14:09, 14:12:01-14:14, 14:17-14:21, 14:23:01, 14:23:02 ^w , 14:23:03-14:24, 14:27, 14:29-14:30, 14:33, 14:36-14:37, 14:40-14:45, 14:47-14:48, 14:51, 14:56, 14:59, 14:63-14:65, 14:67, 14:77-14:78, 14:80-14:81, 14:83-14:85, 14:89, 14:91, 14:94-14:96, 14:98, 14:100, 14:102-14:103, 14:106, 14:108-14:109, 14:115-14:116, 14:121, DRB3*01:14
2^{5,9}	200 bp	430 bp	*13:01:01-13:04, 13:06, 13:08-13:10, 13:12:01-13:13, 13:15-13:16, 13:19, 13:22-13:23:02, 13:27-13:28, 13:30-13:41, 13:45, 13:48, 13:51-13:53, 13:57-13:59, 13:61:01-13:61:02, 13:64-13:66:02, 13:68-13:70, 13:72-13:73, 13:74 ^w , 13:76-13:77, 13:79-13:85, 13:87, 13:89-13:99, 13:101-13:102, 13:104-13:107, 13:109-13:110, 13:112-13:113N, 13:115, 13:117-13:118, 13:120-13:131, 13:135	*11:02:01-11:02:02, 11:14:01-11:14:02, 11:16, 11:18-11:21, 11:31, 11:45, 11:48, 11:65:01-11:65:02, 11:70, 11:73, 11:82, 11:86, 11:98, 11:118-11:119, 14:16, 14:24, 14:37, 14:63, 14:67, 14:78
3	200 bp	430 bp	*13:05:01-13:05:02, 13:07:01-13:07:02,	*08:20, 11:01:01-11:01:16, 11:03-11:04:08, 11:06:01-11:06:02,

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Lot No.: 51N		Lot-specific information		
		13:11:01-13:11:02, 13:14:01-13:14:03, 13:18, 13:21:01- 13:21:02, 13:24, 13:26, 13:42, 13:46-13:47, 13:49-13:50:02, 13:54- 13:55, 13:62-13:63, 13:75, 13:100, 13:108, 13:111, 13:132	11:09-11:12:02, 11:15, 11:23- 11:25, 11:27:01-11:29, 11:32- 11:33, 11:35, 11:37:01-11:41, 11:43-11:44, 11:46:01-11:47, 11:49:01-11:51, 11:54:01-11:56, 11:58:01-11:63, 11:66, 11:72, 11:74:01-11:78, 11:80-11:81, 11:83-11:85, 11:87-11:88, 11:90- 11:97, 11:99-11:102:02, 11:106, 11:108-11:117, 11:120-11:121, 14:22, 14:25, 14:27, 14:53, 14:105	
4	170 bp	430 bp	*13:03:01-13:04, 13:12:01-13:13, 13:21:01-13:21:02, 13:30, 13:32-13:33:03, 13:38, 13:48-13:49, 13:55, 13:58, 13:65- 13:66:02, 13:75, 13:81, 13:88-13:90, 13:93- 13:95, 13:101, 13:108, 13:115, 13:118, 13:120, 13:122, 13:133-13:134	*03:12, 14:13, 14:63, 14:65, 14:78, 14:85
5	220 bp	430 bp	*13:03:01-13:03:06, 13:05:01-13:07:02, 13:10-13:14:03, 13:18, 13:21:01-13:21:02, 13:25-13:26, 13:30, 13:33:01-13:33:03, 13:37, 13:42, 13:44, 13:46-13:47, 13:49- 13:50:02, 13:55-13:56, 13:58, 13:60, 13:62, 13:66:01-13:66:02, 13:77, 13:81-13:82, 13:85-13:86, 13:88- 13:90, 13:94-13:95, 13:100-13:101, 13:108, 13:115, 13:118-13:120, 13:122, 13:132-13:134	*03:76, 08:20, 11:01:01-11:01:16, 11:04:01-11:04:08, 11:06:01- 11:06:02, 11:08:01-11:10:02, 11:12:01-11:13:02, 11:15, 11:17- 11:19:03, 11:23-11:29, 11:31- 11:35, 11:37:01-11:39, 11:42- 11:47, 11:49:01-11:50, 11:52, 11:54:01-11:58:02, 11:60-11:62, 11:64, 11:66, 11:72-11:75, 11:77- 11:81, 11:83-11:84, 11:87-11:97, 11:99-11:102:02, 11:106, 11:108- 11:117, 11:119-11:121, 14:01:01- 14:03:02, 14:05:01-14:09, 14:12:01-14:14, 14:17-14:23:03, 14:25-14:27, 14:29-14:30, 14:32:01-14:36, 14:38-14:45, 14:47-14:49, 14:51, 14:53-14:55, 14:58-14:60, 14:62-14:65, 14:67, 14:69-14:70, 14:72, 14:74-14:75, 14:77-14:78, 14:80-14:86, 14:88- 14:92N, 14:94-14:97, 14:99- 14:103, 14:105-14:106, 14:108-14:110, 14:112-14:119, 14:121-14:122

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6	215 bp	515 bp	*13:01:01-13:02:05, 13:04, 13:08-13:09, 13:15-13:16, 13:19- 13:20, 13:22-13:24, 13:27-13:29, 13:31- 13:32, 13:34-13:36, 13:38-13:41, 13:43, 13:45, 13:48, 13:51- 13:54, 13:57, 13:59, 13:61:01-13:61:02, 13:63-13:65, 13:68- 13:76, 13:78-13:80, 13:83-13:84, 13:87, 13:91-13:93, 13:96:01- 13:99, 13:102, 13:104- 13:107, 13:109, 13:111- 13:114, 13:117, 13:121, 13:123-13:131, 13:135	*11:02:01-11:03, 11:11:01- 11:11:02, 11:14:01-11:14:02, 11:16, 11:20-11:21, 11:36, 11:40- 11:41, 11:48, 11:55, 11:59, 11:63, 11:65:01-11:65:02, 11:68-11:70, 11:76, 11:82, 11:85-11:86, 11:118, 14:16, 14:24, 14:37
7	200 bp	430 bp	*13:02:01-13:02:05, 13:05:01-13:05:02, 13:26, 13:29, 13:31, 13:34, 13:36, 13:39, 13:41, 13:50:01- 13:50:02, 13:56, 13:63, 13:65, 13:67, 13:73- 13:74, 13:85, 13:96:01- 13:96:02, 13:99, 13:103- 13:104, 13:115, 13:119- 13:120, 13:123-13:124, 13:126, 13:128	*03:02:01-03:02:02, 03:05:01- 03:05:03, 03:09, 03:14, 03:27, 03:29, 03:38, 03:53, 03:74, 04:77, 04:102, 11:09, 11:20, 11:28:01- 11:28:02, 11:87, 14:02-14:03:02, 14:09, 14:13, 14:19, 14:24, 14:27, 14:30, 14:46-14:48, 14:51, 14:63, 14:67, 14:85, 14:89, 14:98, 14:109, 14:115, 16:08, DRB3*01:08, DRB3*02:06, DRB3*02:20
8	190 bp	430 bp	*13:01:01-13:01:10, 13:06, 13:09-13:10, 13:15, 13:18, 13:20, 13:27-13:28, 13:32, 13:35, 13:40, 13:42- 13:43, 13:51, 13:53, 13:59, 13:61:01- 13:61:02, 13:69, 13:71, 13:77-13:80, 13:87, 13:91-13:93, 13:98, 13:102, 13:105, 13:110- 13:114, 13:117, 13:121, 13:125, 13:127, 13:129- 13:131	*03:01:01:01-03:01:19, 03:03, 03:06-03:08, 03:10-03:13:02, 03:15-03:16, 03:18-03:20, 03:22- 03:24, 03:26, 03:28, 03:32-03:34, 03:36-03:37, 03:39, 03:42, 03:45- 03:48, 03:50-03:51, 03:54-03:56, 03:58-03:62, 03:64-03:73, 03:76- 03:77, 11:16, 11:40, 11:58:01, 11:59, 11:83, 11:113, 11:115, 14:06:01-14:06:02, 14:12:01- 14:12:02, 14:17-14:18, 14:21, 14:29, 14:33, 14:52, 14:59, 14:64, 14:78, 14:80-14:81, 14:83, 14:95, 14:106, 14:108, 14:121, 15:32
9	270 bp	430 bp	*13:02:01-13:03:06, 13:05:01-13:05:02,	*03:02:01-03:02:02, 03:05:01- 03:05:03, 03:09, 03:14, 03:17,

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10	260 bp	430 bp	*13:01:01-13:01:10, 13:04, 13:06, 13:08- 13:11:02, 13:15, 13:18- 13:20, 13:22, 13:24, 13:27-13:28, 13:32, 13:35, 13:40, 13:42- 13:44, 13:48, 13:51- 13:54, 13:57-13:59, 13:61:01-13:61:02, 13:64, 13:68-13:72, 13:75-13:81, 13:83- 13:84, 13:87, 13:89, 13:91-13:94, 13:98, 13:102, 13:105-13:106, 13:108, 13:110-13:114, 13:117, 13:121, 13:125, 13:127, 13:129-13:131	*03:01:01:01-03:01:19, 03:03- 03:04:02, 03:06-03:08, 03:10- 03:13:02, 03:15-03:16, 03:18- 03:26, 03:28, 03:30-03:34, 03:36- 03:37, 03:39, 03:43-03:52, 03:54- 03:56, 03:58-03:62, 03:64- 03:68N, 03:70-03:73, 03:75- 03:77, 08:20, 11:02:01-11:04:08, 11:06:01-11:07, 11:13:01- 11:13:02, 11:16-11:18, 11:21, 11:25, 11:34-11:36, 11:38, 11:40- 11:44, 11:46:01-11:48, 11:50, 11:52, 11:54:01-11:60, 11:63, 11:65:01-11:65:02, 11:70, 11:76- 11:78, 11:83-11:85, 11:88-11:89, 11:92, 11:98, 11:102:01- 11:102:02, 11:113, 11:115- 11:116, 11:118-11:119, 14:01:01- 14:01:03, 14:05:01-14:06:02, 14:08, 14:12:01-14:12:02, 14:16- 14:18, 14:20-14:21, 14:23:01- 14:23:03, 14:26, 14:29, 14:32:01- 14:35, 14:37-14:39, 14:43, 14:45, 14:54-14:56, 14:58-14:60, 14:62, 14:64-14:65, 14:70, 14:72,

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11²⁵	210 bp	430 bp	*13:09, 13:20, 13:25, 13:29, 13:43, 13:56, 13:60, 13:71, 13:78, 13:88, 13:119, 13:129, 13:134	*11:08:01-11:08:02, 11:36, 11:42, 11:57, 11:64, 11:68-11:69, 11:82, 14:03:01-14:03:02, 14:12:01- 14:12:02, 14:24, 14:37, 14:40, 14:69, 14:74, 14:77, 14:84-14:85, 14:98, 14:102, 14:115-14:116
12	215 bp	430 bp	*13:01:01-13:04, 13:08, 13:10, 13:15-13:16, 13:19-13:20, 13:22- 13:24, 13:26-13:29, 13:31-13:41, 13:43, 13:45, 13:48, 13:51- 13:54, 13:57, 13:59- 13:61:02, 13:63- 13:66:02, 13:68-13:81, 13:83-13:85, 13:87- 13:99, 13:101-13:102, 13:104-13:107, 13:109, 13:111-13:115, 13:117, 13:120-13:128, 13:130- 13:131, 13:133, 13:135	*03:76, 11:01:03, 11:01:10- 11:01:11, 11:02:01-11:03, 11:04:07, 11:11:01-11:11:02, 11:14:01-11:14:02, 11:16, 11:19:02, 11:20-11:21, 11:36, 11:40-11:41, 11:48, 11:59, 11:63, 11:65:01-11:65:02, 11:68, 11:70, 11:73, 11:76, 11:79, 11:85-11:86, 11:93, 11:118, 14:16, 14:19, 14:21, 14:109
13	145 bp	515 bp	*13:03:01-13:03:06, 13:07:01-13:08, 13:12:01-13:13, 13:19, 13:26, 13:32-13:33:03, 13:36-13:38, 13:40, 13:47-13:49, 13:53, 13:55, 13:58, 13:60, 13:65, 13:70, 13:72, 13:76, 13:81, 13:84- 13:85, 13:88-13:90, 13:94-13:95, 13:101, 13:108, 13:115, 13:118, 13:120, 13:122, 13:133- 13:135	*03:02:01-03:03, 03:06, 03:17, 03:26-03:27, 03:31, 03:35, 03:38, 03:41, 03:60, 03:74-03:75, 08:20, 11:17, 11:37:01-11:37:02, 11:41, 11:48, 11:50, 11:52, 11:56, 11:83, 11:107, 14:01:01-14:03:01, 14:05:01-14:09, 14:12:01-14:14, 14:16, 14:18-14:20, 14:22-14:27, 14:29, 14:32:01-14:32:02, 14:34, 14:36-14:41, 14:43-14:45, 14:47- 14:49, 14:51, 14:54-14:56, 14:58- 14:60, 14:62-14:63, 14:67, 14:69- 14:70, 14:74-14:75, 14:77-14:78, 14:80-14:92N, 14:94, 14:96- 14:106, 14:108-14:119, 14:121- 14:122, DRB3*01:14
14	150 bp	430 bp	*13:04, 13:08, 13:17, 13:19, 13:22-13:24, 13:38, 13:45, 13:48, 13:54, 13:57, 13:64,	*04:02:01-04:02:03, 04:14, 04:37, 04:106, 11:02:01-11:03, 11:11:01-11:11:02, 11:14:01- 11:14:02, 11:21, 11:36, 11:41,

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15^{6,10}	85 bp, 235 bp	515 bp	*13:15, 13:19, 13:26, 13:33:01, 13:53, 13:57, 13:61:02, 13:85-13:86, 13:94, 13:96:01, 13:104	*03:01:01:01-03:01:01:02, 03:01:03-03:01:16, 03:01:18- 03:05:02, 03:06-03:11:01, 03:12- 03:13:01, 03:16, 03:18-03:23, 03:25-03:34, 03:36-03:41, 03:43- 03:68N, 03:70-03:77, 11:07, 11:27:02-11:27:03, 11:103, 11:107, 14:02-14:03:02, 14:06:01-14:06:02, 14:12:01- 14:13, 14:18-14:20, 14:24, 14:27, 14:29, 14:40-14:41, 14:47-14:49, 14:51, 14:63, 14:67, 14:77-14:78, 14:81, 14:83, 14:85, 14:89, 14:94, 14:98, 14:102, 14:106, 14:108- 14:109, 14:115
16	150 bp	430 bp	*13:01:01-13:02:01, 13:02:03-13:02:05, 13:08, 13:15-13:16, 13:19-13:20, 13:27- 13:29, 13:31-13:32, 13:34-13:36, 13:39- 13:41, 13:43, 13:51- 13:53, 13:57, 13:59, 13:61:01-13:61:02, 13:63-13:65, 13:67- 13:69, 13:71-13:74, 13:76, 13:78-13:80, 13:83-13:84, 13:87, 13:91-13:93, 13:96:01- 13:99, 13:102-13:107, 13:109, 13:111-13:114, 13:117, 13:121, 13:123- 13:128, 13:130-13:131, 13:135	*11:16, 11:20, 11:40, 11:59, 11:118, 14:16, 14:57, 15:10
17¹¹	220 bp, 255 bp	430 bp	*13:02:02, 13:26, 13:28, 13:60, 13:77	*03:73, 11:01:03, 11:01:10- 11:01:11, 11:04:07, 11:19:02
18^{6,12}	110 bp, 230 bp	430 bp	*13:13, 13:18, 13:33:02- 13:33:03, 13:47, 13:55, 13:61:01, 13:87, 13:96:02, 13:119	*03:01:02, 03:02:02, 03:05:03, 03:11:02, 03:13:02, 03:17, 03:24, 03:27, 03:35, 08:20, 11:23, 11:25, 11:27:01, 11:45, 11:55, 11:64, 11:84, 11:119, 14:03:01- 14:03:02, 14:12:01-14:12:02, 14:27, 14:38, 14:40, 14:47, 14:55,

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19 ^{6,13}	110 bp, 205 bp, 260 bp	430 bp	*13:16, 13:74, 13:87	*11:86
20 ¹⁴	180 bp, 215 bp	515 bp	*13:17, 13:67, 13:73, 13:116	*08:40, DRB3*02:27
21 ^{7,15}	175 bp, 220 bp	430 bp	*13:27, 13:41, 13:71, 13:103	*03:76, 11:59
22 ^{6,8,16}	110 bp, 175 bp	430 bp	*13:31, 13:46, 13:54, 13:68, 13:77, 13:100	*03:38, 11:24, 14:48, DRB3*01:14
23 ^{6,17}	115 bp, 245 bp	430 bp	*13:01:03, 13:28, 13:34, 13:64, 13:76	*03:01:17, 03:43, 03:71, 03:73, 11:01:05, 11:01:10, 11:04:03, 11:06:02, 11:13:01-11:13:02, 11:17, 11:52, 11:54:01, 11:76, 11:114, 14:01:01, 14:01:03, 14:05:01-14:05:02, 14:07:01- 14:08, 14:14, 14:18, 14:23:01- 14:23:03, 14:26, 14:32:02, 14:34- 14:36, 14:39, 14:41-14:44:01, 14:44:03-14:45, 14:54-14:56, 14:58-14:60, 14:62, 14:64-14:65, 14:70, 14:72, 14:77, 14:82, 14:86-14:88, 14:90-14:92N, 14:95-14:97, 14:99-14:101, 14:104-14:105, 14:110-14:114, 14:117-14:118, 14:122, DRB3*01:14
24 ¹⁸	145 bp, 180 bp	430 bp	*13:35, 13:39, 13:54, 13:77-13:79, 13:100	*03:13:01-03:13:02, 03:38, 11:116, 11:120, 14:48, 14:64, 14:109, 14:115, DRB3*01:14
25 ⁶	110 bp	430 bp	*13:03:01-13:04, 13:07:01-13:08, 13:11:01-13:14:03, 13:19, 13:21:01-13:25, 13:30, 13:33:01- 13:33:03, 13:37-13:38, 13:44-13:49, 13:52, 13:54-13:55, 13:57- 13:58, 13:60, 13:66:01- 13:66:02, 13:70, 13:72, 13:75-13:76, 13:81- 13:84, 13:86, 13:88- 13:90, 13:94-13:95,	*03:04:01-03:04:02, 03:17, 03:21, 03:25, 03:30-03:31, 03:35, 03:40- 03:41, 03:49, 03:75, 08:20, 11:01:01-11:04:08, 11:06:01- 11:08:02, 11:10:01-11:14:02, 11:17-11:19:03, 11:21, 11:23, 11:25-11:27:03, 11:29, 11:31- 11:39, 11:41-11:43, 11:45-11:48, 11:51-11:57, 11:60-11:66, 11:68- 11:70, 11:72-11:75, 11:77-11:82, 11:84, 11:86, 11:88-11:103, 11:105-11:112, 11:116-11:121, 14:01:01-14:01:03,

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26	140 bp	430 bp	*13:05:01-13:05:02, 13:18, 13:42, 13:50:02, 13:63, 13:111, 13:132	*08:09, 08:21, 11:01:12, 11:04:04, 11:09-11:10:02, 11:12:02, 11:22, 11:28:02, 11:40, 11:46:01, 11:58:01, 11:59, 11:83, 11:87, 11:113, 11:115, 14:15, 14:22, 14:73, 14:105, 16:01:02
27	145 bp	515 bp	*13:01:01-13:01:08, 13:01:10-13:02:05, 13:04-13:06, 13:09- 13:11:02, 13:14:01- 13:16, 13:18, 13:20- 13:25, 13:27-13:31, 13:34, 13:39, 13:41- 13:46, 13:50:01-13:52, 13:54, 13:56-13:57, 13:59, 13:61:01-13:64, 13:66:01-13:66:02, 13:68-13:69, 13:71, 13:73-13:75, 13:77- 13:80, 13:82-13:83, 13:86-13:87, 13:91- 13:93, 13:96:01-13:100, 13:102, 13:104-13:107, 13:109-13:114, 13:117, 13:119, 13:121, 13:123- 13:132	*03:01:01:01-03:01:19, 03:04:01- 03:05:03, 03:07-03:16, 03:18- 03:25, 03:28-03:30, 03:32-03:34, 03:36-03:37, 03:39-03:40, 03:43- 03:52, 03:54-03:59, 03:61- 03:68N, 03:70-03:73, 03:76- 03:77, 11:01:01-11:01:06, 11:01:08-11:04:08, 11:06:01- 11:16, 11:18-11:21, 11:23-11:29, 11:31-11:36, 11:38-11:40, 11:42- 11:47, 11:49:01-11:49:02, 11:51, 11:53-11:55, 11:57-11:66, 11:68- 11:70, 11:72-11:82, 11:84-11:87, 11:89-11:103, 11:105-11:106, 11:108-11:121, 14:17, 14:21, 14:30, 14:33, 14:35, 14:42, 14:53, 14:64-14:65, 14:72, 14:95
28	160 bp	430 bp	*13:01:01-13:01:10, 13:04, 13:06, 13:09- 13:11:02, 13:15, 13:17- 13:18, 13:20, 13:22, 13:24, 13:27-13:28, 13:35, 13:42-13:44, 13:51-13:52, 13:54, 13:57, 13:59, 13:61:01- 13:61:02, 13:64, 13:68- 13:69, 13:71, 13:75,	*01:44, 03:01:01:01-03:01:15, 03:01:17-03:01:19, 03:04:01- 03:04:02, 03:07-03:08, 03:10- 03:13:02, 03:15-03:16, 03:18- 03:25, 03:28, 03:30, 03:32-03:34, 03:36-03:37, 03:39, 03:42-03:52, 03:54-03:56, 03:58-03:59, 03:61- 03:62, 03:64-03:73, 03:76, 04:42, 04:59, 08:28, 11:02:01-11:04:08, 11:06:01-11:07,

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29⁸	155 bp	430 bp	*13:15, 13:19, 13:53, 13:57, 13:85, 13:104	*08:32, 12:01:01-12:01:04, 12:03:02-12:06, 12:08-12:11, 12:14, 12:17, 12:22, 12:24N- 12:25, 12:29-12:30, 12:34-12:35, 14:63, 14:67, 14:78
30^{6,9}	85 bp	515 bp	*13:01:01-13:01:10, 13:04, 13:08, 13:15, 13:17, 13:19, 13:22, 13:27-13:28, 13:32, 13:35, 13:40, 13:48, 13:51-13:53, 13:57, 13:59, 13:61:01- 13:61:02, 13:64, 13:68- 13:70, 13:72, 13:76, 13:79-13:80, 13:83- 13:84, 13:87, 13:91- 13:93, 13:98, 13:102, 13:105-13:106, 13:110, 13:112-13:113, 13:116- 13:117, 13:121, 13:125, 13:127, 13:130-13:131	*01:42, 04:02:01-04:02:03, 11:02:01-11:02:02, 11:16, 11:21, 11:48, 11:65:01-11:65:02, 11:70, 11:118, 14:16, 14:57, 15:10
31¹⁹	175 bp, 205 bp	430 bp	*13:59, 13:72	
32	215 bp	430 bp	*13:02:02, 13:03:01- 13:03:06, 13:10, 13:26, 13:33:01-13:33:03, 13:37, 13:60, 13:66:01-	*03:76, 11:01:03, 11:01:10- 11:01:11, 11:04:07, 11:19:02, 11:73, 11:79, 11:93, 14:19, 14:21, 14:109

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33⁶	80 bp	430 bp	*13:43, 13:45	*03:10, 11:31, 11:96, 14:35, 14:53, 14:72
34²⁰	145 bp, 255 bp	430 bp	*13:58, 13:80-13:81	*03:16, 03:20, 11:06:01-11:06:02, 11:21, 11:47, 11:57, 14:29, 14:99
35	150 bp	430 bp	*13:51	
36^{6,8,21}	75 bp, 170 bp, 260 bp	430 bp	*13:90, 13:92, 13:98	*14:26
37⁶	100 bp	515 bp	*13:32, 13:65, 13:93, 13:120	*03:12, 14:13, 14:63, 14:78, 14:85
38⁶	70 bp	430 bp	*13:33:01, 13:61:02, 13:94, 13:96:01	*03:19, 15:37
39^{6,22}	80 bp, 130 bp	430 bp	*13:95, 13:102	
40^{6,23}	90 bp, 120 bp, 155 bp	430 bp	*13:91, 13:99, 13:101	*14:118
41^{6,24}	115 bp, 160 bp	430 bp	*13:106, 13:113N	*03:26, 03:33, 03:44, 11:44, 11:49:01-11:50, 11:85, 14:97
42	235 bp	430 bp	*13:112, 13:128	
43	185 bp	430 bp	*13:117	

¹Alleles 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 DRB1*13 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective lengths of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

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.

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherent 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.

²The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 430 base pairs, for most wells, or a band of 515 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in order to help in the correct orientation of the DRB1*13 subtyping.

In addition, wells number 6, 13, 15, 20, 27, 30 and 37 contain the primer pair giving rise to the

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longer, 515 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

³For several DRB alleles only second exon nucleotide sequences are 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. We assume that unknown sequences in the first hyperpolymorphic region of the second exon of DRB alleles are conserved within allelic groups and that unknown sequences of codons 87 to 92 are identical with the DRB1*0101 consensus sequence.

⁴Due to the sharing of sequence motifs within groups of DRB1 alleles, non-DRB1*13 alleles are amplified by primer mixes 1 to 30, 32 to 34, 36 to 38, 40 and 41. In addition, the DRB3*01:14 allele will be amplified by primer mixes 1, 9, 13, 18 and 22 to 24, the DRB3*01:08, DRB3*02:06 and DRB3*02:20 alleles will be amplified by primer mix 7 and the DRB3*02:27 allele will be amplified by primer mix 20.

⁵Primer mix 2 may faintly amplify the DRB1*13:29 allele.

⁶Specific PCR fragments shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR bands.

⁷Primer mixes 21 may give rise to nonspecific amplifications.

⁸Primer mixes 22, 29 and 36 have a tendency of giving rise to a primer oligomer artefact.

⁹Primer mixes 2 and 30 may give a lower yield of HLA-specific PCR product than the other DRB1*13 primer mixes.

¹⁰Primer mix 15: Specific PCR fragment of 85 bp in the DRB1*13:15, 13:19, 13:26, 13:53, 13:57, 13:85-13:86 and 13:104 and the DRB1*03:02:02, 03:27, 14:02-14:03:02, 14:06:01-14:06:02, 14:12:01-14:13, 14:18-14:20, 14:24, 14:27, 14:29, 14:40-14:41, 14:47-14:49, 14:51, 14:63, 14:67, 14:77-14:78, 14:81, 14:83, 14:85, 14:89, 14:94, 14:98, 14:102, 14:106, 14:108-14:109 and 14:115 alleles. Specific PCR fragment of 235 bp in the DRB1*13:33:01, 13:61:02, 13:94 and 13:96:01 and the DRB1*03:01:01:01-03:01:01:02, 03:01:03-03:01:16, 03:01:18-03:01:19, 03:04:01-03:05:02, 03:06-03:11:01, 03:12-03:13:01, 03:16, 03:18-03:23, 03:25-03:26, 03:28, 03:30-03:34, 03:36-03:37, 03:39-03:41, 03:43-03:52, 03:54-03:68N, 03:70-03:73, 03:75-03:77, 11:07, 11:27:02-11:27:03, 11:103 and 11:107 alleles. Specific PCR fragments of 85 and 235 bp in DRB1*03:02:01, 03:03 and 03:29, 03:38, 03:53 and 03:74 alleles. Both specific PCR fragments may not be visible.

¹¹Primer mix 17: Specific PCR fragment of 220 bp in the DRB1*13:02:02, 13:26, 13:60 and 13:77 and the DRB1*11:01:03, 11:01:10-11:01:11, 11:04:07 and 11:19:02 alleles. Specific PCR fragment of 255 bp in the DRB1*13:28 and the DRB1*03:73 alleles.

¹²Primer mix 18: Specific PCR fragment of 110 bp in the DRB1*13:87 allele. Specific PCR fragment of 230 bp in the DRB1*13:13, 13:18, 13:33:02-13:33:03, 13:47, 13:55, 13:61:01, 13:96:02 and 13:119 and the DRB1*03:01:02, 03:02:02, 03:05:03, 03:11:02, 03:13:02, 03:17, 03:24, 03:27, 03:35, 08:20, 11:23, 11:25, 11:27:01, 11:45, 11:55, 11:64, 11:84, 11:119, 14:03:01-14:03:02, 14:12:01-14:12:02, 14:27, 14:38, 14:40, 14:47, 14:55, 14:63, 14:67, 14:77-14:78, 14:84-14:85, 14:89, 14:98, 14:102 and 14:115-14:116 and in the DRB3*01:14 alleles.

¹³Primer mix 19: Specific PCR fragment of 110 bp in the DRB1*13:87 allele. Specific PCR fragment of 205 bp in the DRB1*13:74 allele. Specific PCR fragment of 260 bp in the DRB1*13:16 and the DRB1*11:86 alleles.

¹⁴Primer mix 20: Specific PCR fragment of 180 bp in the DRB1*13:73 allele.

Specific PCR fragment of 215 bp in the DRB1*13:17, 13:67, 13:73 and 13:116 and the DRB1*08:40 and the DRB3*02:27 alleles.

¹⁵Primer mix 21: Specific PCR fragment of 175 bp in the DRB1*13:27, 13:41 and 13:71 and the DRB1*03:76 and 11:59 alleles.

Specific PCR fragment of 220 bp in the DRB1*13:103 allele.

¹⁶Primer mix 22: Specific PCR fragment of 110 bp in the DRB1*13:68 and the 11:24 alleles.

Specific PCR fragment of 175 bp in the DRB1*13:31, 13:46, 13:54, 13:77 and 13:100 and the DRB1*03:38 and 14:48 and in the DRB3*01:14 alleles.

¹⁷Primer mix 23: Specific PCR fragment of 115 bp in the DRB1*13:34 and 13:64 and the DRB1*03:43, 03:71, 11:76, 11:114, 14:41 and 14:77 and in the DRB3*01:14 alleles. Specific PCR fragment of 245 bp in the DRB1*13:01:03, 13:28 and 13:76 and the DRB1*03:01:17, 03:73, 11:01:05, 11:01:10, 11:04:03, 11:06:02, 11:13:01-11:13:02, 11:17, 11:52, 11:54:01, 14:01:01, 14:01:03, 14:05:01-14:05:02, 14:07:01-14:08, 14:14, 14:18, 14:23:01-14:23:03, 14:26, 14:32:02, 14:34-14:36, 14:39, 14:42-14:44:01, 14:44:03-14:45, 14:54-14:56, 14:58-14:60,

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14:62, 14:64-14:65, 14:70, 14:72, 14:82, 14:86-14:88, 14:90-14:92N, 14:95-14:97, 14:99-14:101, 14:104-14:105, 14:111-14:114, 14:117-14:118 and 14:122 alleles. Specific PCR fragment of 115 and 245 bp in the DRB1*14:110 allele.

¹⁸Primer mix 24: Specific PCR fragment of 145 bp in the DRB1*13:35 allele. Specific PCR fragment of 180 bp in the DRB1*13:39, 13:54, 13:77-13:79 and 13:100 and the DRB1*03:13:01-03:13:02, 03:38, 11:116, 11:120, 14:48, 14:64, 14:109 and 14:115 and in the DRB3*01:14 alleles.

¹⁹Primer mix 31: Specific PCR fragment of 175 bp in the DRB1*13:59 allele. Specific PCR fragment of 205 bp in the DRB1*13:72 allele.

²⁰Primer mix 34: Specific PCR fragment of 145 bp in the DRB1*13:80 and the DRB1*03:16 alleles.

Specific PCR fragment of 255 bp in the DRB1*13:58 and 13:81 and the DRB1*03:20, 11:06:01-11:06:02, 11:21, 11:47, 11:57, 14:29 and 14:99 alleles.

²¹Primer mix 36: Specific PCR fragment of 75 bp in the DRB1*13:92 and the DRB1*14:26 alleles. Specific PCR fragment of 170 bp in the DRB1*13:90 allele. Specific PCR fragment of 260 bp in the DRB1*13:98 allele.

²²Primer mix 39: Specific PCR Specific PCR fragment of of 80 bp in the DRB1*13:102 allele. Specific PCR Specific PCR fragment of of 130 bp in the DRB1*13:95 allele.

²³Primer mix 40: Specific PCR fragment of 90 bp in the DRB1*13:101 allele. Specific PCR fragment of 120 bp in the DRB1*13:91 allele. Specific PCR fragment of 155 bp in the DRB1*13:99 and the DRB1*14:118 alleles.

²⁴Primer mix 41: Specific PCR fragment of 115 bp in the DRB1*13:106 and in the DRB1*03:26, 03:33, 03:44, 11:44, 11:49:01-11:50, 11:85 and 14:97 alleles. Specific PCR fragment of 160 bp in the DRB1*13:113N allele.

²⁵Primer mix 11 may faintly amplify the DRB1*11:03, 11:11, 11:40, 11:41, 11:59, 11:63, 11:76 and 11:85 alleles.

‘w’, may be weakly amplified.

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INTERPRETATION TABLE																									
DRB1*13 SSP subtyping																									
Amplification patterns of the DRB1*13:01 to *13:135 alleles																									
	Well ⁶																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	215	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	175	245	180
Length of int. pos. control ¹	515	430	430	430	430	515	430	430	430	430	430	430	515	430	515	430	430	430	430	515	430	430	430	430	430
5'-primer(s) ²	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-AgA 3' 37(196)	5'-AgA 3' 37(196)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-TCT 3' 32(181)	5'-gTC 3' 13(125)	5'-CAG 3' 34(189)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 10(116)	5'-TAT 3' 12(122)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)	5'-gTC 3' 13(125)
3'-primer(s) ³	5'-CAG 3' 58(260)	5'-gAT 3' 67(286)	5'-gAA 3' 67(286)	5'-gCT 3' 57(256)	5'-CCT 3' 71(298)	5'-CTC 3' 71(298)	5'-CAC 3' 86(344)	5'-CCA 3' 86(344)	5'-CCT 3' 93(364)	5'-CCA 3' 86(344)	5'-gAG 3' 67(286)	5'-gCT 3' 71(299)	5'-gGT 3' 47(227)	5'-CTC 3' 71(298)	5'-CTC 3' 28(171)	5'-CTC 3' 71(298)	5'-gCg 3' 72(303)	5'-gAT 3' 37(196)	5'-gAT 3' 37(196)	5'-gCT 3' 71(299)	5'-gCT 3' 71(299)	5'-gCT 3' 71(299)	5'-gTC 3' 37(196)	5'-CAG 3' 38(199)	5'-CCA 3' 48(230)
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

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Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DRB1 allele ⁴																								
*13:01:01-13:01:02, 13:01:04-13:01:08, 13:01:10, 13:105, 13:121, 13:125, 13:127, 13:130-13:131	1	2				6		8		10		12				16								
*13:01:03	1	2				6		8		10		12				16							23	
*13:01:09	1	2				6		8		10		12				16								
*13:02:01, 13:02:03- 13:02:05, 13:123-13:124, 13:126	1	2				6	7		9			12				16								
*13:02:02	1	2				6	7		9			12					17							
*13:03:01-13:03:06	1	2		4	5				9			12	13											
*13:04	1	2		4		6				10		12		14										
*13:05:01-13:05:02, 13:50:02	1		3		5		7		9															
*13:06	1	2			5			8		10														
*13:07:01-13:07:02	1		3		5				9				13											
*13:08	1	2				6				10		12	13	14		16								
*13:09, 13:129	1	2				6		8		10	11													
*13:10	1	2			5			8		10		12												
*13:11:01-13:11:02	1		3		5					10														
*13:12:01-13:12:02, 13:118	1	2		4	5				9				13											
*13:13	1	2		4	5				9				13					18						
*13:14:01-13:14:03	1		3		5				9															
*13:15	1	2				6		8		10		12			15	16								
*13:16	1	2				6						12				16			19					
*13:17														14						20				
*13:18	1		3		5			8		10								18						
*13:19	1	2				6				10		12	13	14	15	16								
*13:20	1					6		8		10	11	12				16								
*13:21:01-13:21:02	1		3	4	5				9															
*13:22	1	2				6				10		12		14										
*13:23:01-13:23:02	1	2				6			9			12		14										
*13:24	1		3			6				10		12		14										
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

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110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		170				130	120	160		PCR product(s)
											260					155			
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
																			DRB1 allele ⁴
		27	28		30														*13:01:01-13:01:02, 13:01:04-13:01:08, 13:01:10, 13:105, 13:121, 13:125, 13:127, 13:130-13:131
		27	28		30														*13:01:03
			28		30														*13:01:09
		27																	*13:02:01, 13:02:03- 13:02:05, 13:123-13:124, 13:126
		27					32												*13:02:02
25							32												*13:03:01-13:03:06
25		27	28		30														*13:04
		26	27																*13:05:01-13:05:02, 13:50:02
		27	28																*13:06
25																			*13:07:01-13:07:02
25					30														*13:08
		27	28																*13:09, 13:129
		27	28				32												*13:10
25		27	28																*13:11:01-13:11:02
25																			*13:12:01-13:12:02, 13:118
25																			*13:13
25		27																	*13:14:01-13:14:03
		27	28	29	30														*13:15
		27																	*13:16
			28		30														*13:17
	26	27	28																*13:18
25				29	30														*13:19
		27	28																*13:20
25		27																	*13:21:01-13:21:02
25		27	28		30														*13:22
25		27																	*13:23:01-13:23:02
25		27	28																*13:24
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

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Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*13:25	1				5				9		11													
*13:26	1		3		5		7		9			12	13		15		17							
*13:27	1	2				6		8		10		12				16					21			
*13:28	1	2				6		8		10		12				16	17						23	
*13:29	1					6	7		9		11	12				16								
*13:30	1	2		4	5				9															
*13:31	1	2				6	7		9			12				16						22		
*13:32	1	2		4		6		8		10		12	13			16								
*13:33:01	1	2		4	5				9			12	13		15									
*13:33:02-13:33:03	1	2		4	5				9			12	13				18							
*13:34	1	2				6	7		9			12				16							23	
*13:35	1	2				6		8		10		12				16								24
*13:36	1	2				6	7		9			12	13			16								
*13:37	1	2			5				9			12	13											
*13:38	1	2		4		6			9			12	13	14										
*13:39	1	2				6	7		9			12				16								24
*13:40	1	2				6		8		10		12	13			16								
*13:41	1	2				6	7		9			12				16					21			
*13:42	1		3		5			8		10														
*13:43						6		8		10	11	12				16								
*13:44	1				5				10															
*13:45		2				6			9			12		14										
*13:46	1		3		5				9													22		
*13:47	1		3		5				9				13				18							
*13:48	1	2		4		6				10		12	13	14										
*13:49	1		3	4	5				9				13											
*13:50:01	1		3		5		7		9															
*13:51	1	2				6		8		10		12				16								
*13:52	1	2				6				10		12				16								
*13:53	1	2				6		8		10		12	13		15	16								
*13:54	1		3			6				10		12		14								22		24
*13:55	1		3	4	5				9				13				18							
*13:56	1				5		7		9		11													
*13:57	1	2				6				10		12		14	15	16								
*13:58	1	2		4	5					10			13											
*13:59	1	2				6		8		10		12				16								
*13:60	1				5				9		11	12	13				17							
*13:61:01	1	2				6		8		10		12				16		18						
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

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110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		260				130	120	160		PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
	25	27					32												*13:25
																			*13:26
		27	28		30														*13:27
		27	28		30														*13:28
		27																	*13:29
25	27																		*13:30
		27																	*13:31
				30								37							*13:32
25							32						38						*13:33:01
25							32												*13:33:02-13:33:03
		27																	*13:34
			28		30														*13:35
																			*13:36
25							32												*13:37
25																			*13:38
		27																	*13:39
				30															*13:40
		27																	*13:41
	26	27	28																*13:42
		27	28					33											*13:43
25	27	28																	*13:44
25	27							33											*13:45
25	27																		*13:46
25																			*13:47
25				30															*13:48
25																			*13:49
		27																	*13:50:01
		27	28		30					35									*13:51
25	27	28		30															*13:52
				29	30														*13:53
25	27	28																	*13:54
25																			*13:55
		27																	*13:56
25	27	28	29	30															*13:57
25								34											*13:58
		27	28		30	31													*13:59
25							32												*13:60
		27	28		30														*13:61:01
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

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Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145	
PCR product(s)															235		255	230	205	215	220	175	245	180	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
*13:61:02	1	2				6		8		10		12			15	16									
*13:62	1		3		5				9																
*13:63	1		3			6	7		9			12				16									
*13:64	1	2				6				10		12		14		16							23		
*13:65	1	2		4		6	7		9			12	13			16									
*13:66:01-13:66:02	1	2		4	5				9			12													
*13:67							7									16				20					
*13:68	1	2				6				10		12				16						22			
*13:69	1	2				6		8		10		12		14		16									
*13:70	1	2				6				10		12	13	14											
*13:71	1					6		8		10	11	12				16					21				
*13:72	1	2				6				10		12	13	14		16									
*13:73	1	2				6	7		9			12				16				20					
*13:74	1	w				6	7		9			12				16			19						
*13:75	1		3	4		6				10		12		14											
*13:76	1	2				6				10		12	13	14		16							23		
*13:77	1	2			5			8		10		12					17					22		24	
*13:78	1					6		8		10	11	12				16								24	
*13:79	1	2				6		8		10		12				16								24	
*13:80	1	2				6		8		10		12				16									
*13:81	1	2		4	5					10		12	13												
*13:82	1	2			5				9																
*13:83	1	2				6				10		12		14		16									
*13:84	1	2				6				10		12	13			16									
*13:85	1	2			5		7		9			12	13		15										
*13:86	1				5				9						15										
*13:87	1	2				6		8		10		12				16		18	19						
*13:88	1			4	5				9		11	12	13												
*13:89	1	2		4	5					10		12	13												
*13:90	1	2		4	5				9			12	13												
*13:91	1	2				6		8		10		12				16									
*13:92, 13:98 ⁵	1	2				6		8		10		12				16									
*13:93	1	2		4		6		8		10		12				16									
*13:94	1	2		4	5					10		12	13		15										
*13:95	1	2		4	5				9			12	13												
*13:96:01	1	2				6	7		9			12			15	16									
*13:96:02	1	2				6	7		9			12				16		18							
*13:97	1	2				6			9			12				16									
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		260				130	120	160		PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
		27	28		30								38						*13:61:02
		27																	*13:62
	26	27																	*13:63
		27	28		30														*13:64
												37							*13:65
25		27					32												*13:66:01-13:66:02
																			*13:67
		27	28		30														*13:68
		27	28		30														*13:69
25					30														*13:70
		27	28																*13:71
25					30	31													*13:72
		27																	*13:73
		27																	*13:74
25		27	28																*13:75
25					30														*13:76
		27	28				32												*13:77
		27	28																*13:78
		27	28		30														*13:79
		27	28		30			34											*13:80
25							32	34											*13:81
25		27																	*13:82
25		27	28		30														*13:83
25					30														*13:84
				29			32												*13:85
25		27																	*13:86
		27	28		30														*13:87
25							32												*13:88
25							32												*13:89
25							32				36								*13:90
		27	28		30										40				*13:91
		27	28		30						36								*13:92, 13:98 ⁵
		27	28		30							37							*13:93
25							32						38						*13:94
25							32							39					*13:95
		27											38						*13:96:01
		27																	*13:96:02
25		27																	*13:97
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101. 116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*13:99	1	2				6	7		9			12				16								
*13:100	1		3		5				9													22		24
*13:101	1	2		4	5				9			12	13											
*13:102	1	2				6		8		10		12				16								
*13:103							7									16					21			
*13:104	1	2				6	7		9			12			15	16								
*13:106	1	2				6				10		12				16								
*13:107	1	2				6			9			12		14		16								
*13:108	1		3	4	5					10			13											
*13:109	1	2				6						12				16								
*13:110	1	2						8		10														
*13:111	1		3			6		8		10		12				16								
*13:112	1	2				6		8		10		12				16								
*13:113N	1	2				6		8		10		12				16								
*13:114	1					6		8		10		12				16								
*13:115	1	2		4	5		7		9			12	13											
*13:116														14						20				
*13:117	1	2				6		8		10		12				16								
*13:119	1				5		7		9		11						18							
*13:120	1	2		4	5		7		9			12	13											
*13:122		2		4	5				9			12	13											
*13:128	1	2				6	7		9			12				16								
*13:132	1		3		5				9															
*13:133	1			4	5				9			12	13											
*13:134	1			4	5				9		11		13											
*13:135	1	2				6			9			12	13	14		16								
*01:42																								
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec. PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
						205			255		260				130	120	160		
		27													40				*13:99
25		27																	*13:100
25							32								40				*13:101
		27	28		30									39					*13:102
																			*13:103
		27		29															*13:104
		27	28		30											41			*13:106
25		27																	*13:107
25																			*13:108
		27																	*13:109
		27	28		30														*13:110
	26	27	28																*13:111
		27	28		30												42		*13:112
		27	28		30											41			*13:113N
		27	28																*13:114
							32												*13:115
					30														*13:116
		27	28		30													43	*13:117
		27																	*13:119
							32					37							*13:120
25							32												*13:122
		27															42		*13:128
25	26	27																	*13:132
25							32												*13:133
25																			*13:134
25																			*13:135
					30														*01:42
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*01:44, 04:42, 04:59, 08:28, 11:67, 11:104, 12:02:01-12:02:05, 12:07, 12:12-12:13, 12:15, 12:18-12:20, 12:23, 12:26-12:28, 12:31N-12:33, 15:01:01:01-15:01:17, 15:03:01:01-15:06, 15:09, 15:12-15:13, 15:16-15:18, 15:20-15:25, 15:28, 15:33, 15:35-15:36, 15:40-15:43, 15:45-15:46, 15:49-15:57, 15:59, 15:61-15:62, 15:64-15:67, 15:69																								
*03:01:01:01-03:01:01:02, 03:01:03-03:01:05, 03:01:07-03:01:08, 03:01:10-03:01:15, 03:01:18-03:01:19, 03:07, 03:11:01, 03:18, 03:22-03:23, 03:28, 03:32, 03:34, 03:36-03:37, 03:39, 03:45, 03:47-03:48, 03:50-03:51, 03:54-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:68N, 03:70, 03:72	1							8		10					15									
*03:01:02, 03:11:02, 03:24	1							8		10								18						
*03:01:06, 03:01:09, 03:08, 03:46, 03:64-03:65								8		10					15									
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101. 116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		170				130	120	160		PCR product(s)
											260				155				
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
			28																*01:44, 04:42, 04:59, 08:28, 11:67, 11:104, 12:02:01-12:02:05, 12:07, 12:12-12:13, 12:15, 12:18-12:20, 12:23, 12:26-12:28, 12:31N-12:33, 15:01:01:01-15:01:17, 15:03:01:01-15:06, 15:09, 15:12-15:13, 15:16-15:18, 15:20-15:25, 15:28, 15:33, 15:35-15:36, 15:40-15:43, 15:45-15:46, 15:49-15:57, 15:59, 15:61-15:62, 15:64-15:67, 15:69
		27	28																*03:01:01:01-03:01:01:02, 03:01:03-03:01:05, 03:01:07-03:01:08, 03:01:10-03:01:15, 03:01:18-03:01:19, 03:07, 03:11:01, 03:18, 03:22-03:23, 03:28, 03:32, 03:34, 03:36-03:37, 03:39, 03:45, 03:47-03:48, 03:50-03:51, 03:54-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:68N, 03:70, 03:72
		27	28																*03:01:02, 03:11:02, 03:24
		27	28																*03:01:06, 03:01:09, 03:08, 03:46, 03:64-03:65
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145	
PCR product(s)															235		255	230	260	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
*03:01:16, 03:77	1							8		10					15										
*03:01:17	1							8		10													23		
*03:02:01, 03:74	1						7		9				13		15										
*03:02:02, 03:27	1						7		9				13		15		18								
*03:03, 03:06, 03:60	1							8		10			13		15										
*03:04:01-03:04:02, 03:21, 03:25, 03:30, 03:49	1									10					15										
*03:05:01-03:05:02, 03:09, 03:29	1						7		9						15										
*03:05:03	1						7		9								18								
*03:10								8		10					15										
*03:12	1			4				8		10					15										
*03:13:01	1							8		10					15									24	
*03:13:02	1							8		10							18							24	
*03:14	1						7		9																
*03:15	1							8		10															
*03:16, 03:20	1							8		10					15										
*03:17, 03:35	1								9				13				18								
*03:19	1							8		10					15										
*03:26	1							8		10			13		15										
*03:31, 03:75	1									10			13		15										
*03:33	1							8		10					15										
*03:38	1						7		9				13		15							22		24	
*03:40	1								9						15										
*03:41	1								9				13		15										
*03:42, 03:69, 15:32								8																	
*03:43	1									10					15									23	
*03:44	1									10					15										
*03:52	1									10					15										
*03:53	1						7		9						15										
*03:57, 03:63	1														15										
*03:71	1							8		10					15									23	
*03:73	1							8		10					15		17							23	
*03:76	1				5			8		10		12			15						21				
*04:02:01-04:02:03														14											
*04:14, 04:37, 04:106														14											
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

101.116-24/03 – including *Taq* pol., IFU-01
 101. 116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		260				130	120	160		PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
		27																	*03:01:16, 03:77
		27	28																*03:01:17
																			*03:02:01, 03:74
																			*03:02:02, 03:27
25		27	28																*03:03, 03:06, 03:60
		27																	*03:04:01-03:04:02, 03:21, 03:25, 03:30, 03:49
		27																	*03:05:01-03:05:02, 03:09, 03:29
		27																	*03:05:03
		27	28					33											*03:10
		27	28									37							*03:12
		27	28																*03:13:01
		27	28																*03:13:02
		27																	*03:14
		27	28																*03:15
25		27	28					34											*03:16, 03:20
		27	28																*03:17, 03:35
		27	28										38						*03:19
25																41			*03:26
		27	28																*03:31, 03:75
		27	28													41			*03:33
25		27																	*03:38
25																			*03:40
			28																*03:41
																			*03:42, 03:69, 15:32
		27	28																*03:43
		27	28													41			*03:44
		27	28																*03:52
																			*03:53
		27																	*03:57, 03:63
		27	28																*03:71
		27	28																*03:73
		27	28				32												*03:76
					30														*04:02:01-04:02:03
																			*04:14, 04:37, 04:106
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*04:77, 04:102, 14:46, 16:08, <i>DRB3*01:08</i> , <i>DRB3*02:06</i> , <i>DRB3*02:20</i>							7																	
*08:09, 08:21, 11:22, 14:15, 14:73, 16:01:02																								
*08:20	1		3		5				10				13				18							
*08:32, 12:11, 12:22																								
*08:40, <i>DRB3*02:27</i>																				20				
*11:01:01-11:01:02, 11:01:04, 11:01:06, 11:01:08-11:01:09, 11:01:13-11:01:16, 11:12:01, 11:29, 11:32-11:33, 11:39, 11:61-11:62, 11:66, 11:72, 11:74:01- 11:75, 11:80-11:81, 11:90-11:91, 11:94- 11:95, 11:97, 11:99- 11:101, 11:106, 11:108-11:112, 11:117, 11:121			3		5			9																
*11:01:03, 11:01:11			3		5			9		12							17							
*11:01:05			3		5			9															23	
*11:01:07			3		5			9																
*11:01:10			3		5			9		12							17						23	
*11:01:12, 11:10:01- 11:10:02, 11:12:02			3		5			9																
*11:02:01-11:02:02, 11:65:01-11:65:02, 11:70		2				6			10	12			14											
*11:03, 11:63			3			6			10	12			14											
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101. 116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.	
						205			255		260				130	120	160			PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.	
																				*04:77, 04:102, 14:46, 16:08, <i>DRB3*01:08</i> , <i>DRB3*02:06</i> , <i>DRB3*02:20</i>
	26																			*08:09, 08:21, 11:22, 14:15, 14:73, 16:01:02
25																				*08:20
				29																*08:32, 12:11, 12:22
																				*08:40, <i>DRB3*02:27</i>
25		27																		*11:01:01-11:01:02, 11:01:04, 11:01:06, 11:01:08-11:01:09, 11:01:13-11:01:16, 11:12:01, 11:29, 11:32-11:33, 11:39, 11:61-11:62, 11:66, 11:72, 11:74:01- 11:75, 11:80-11:81, 11:90-11:91, 11:94- 11:95, 11:97, 11:99- 11:101, 11:106, 11:108-11:112, 11:117, 11:121
25	27						32													*11:01:03, 11:01:11
25	27																			*11:01:05
25																				*11:01:07
25	27						32													*11:01:10
25	26	27																		*11:01:12, 11:10:01- 11:10:02, 11:12:02
25		27	28		30															*11:02:01-11:02:02, 11:65:01-11:65:02, 11:70
25	27	28																		*11:03, 11:63
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.	

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*11:04:01-11:04:02, 11:04:05-11:04:06, 11:04:08, 11:35, 11:38, 11:43, 11:46:02, 11:54:02, 11:60, 11:77-11:78, 11:92, 11:102:01- 11:102:02			3		5					10														
*11:04:03, 11:54:01			3		5					10													23	
*11:04:04, 11:46:01			3		5					10														
*11:04:07			3		5					10	12						17							
*11:06:01, 11:47			3		5					10														
*11:06:02			3		5					10													23	
*11:07										10					15									
*11:08:01-11:08:02					5				9		11													
*11:09, 11:28:02, 11:87			3		5		7		9															
*11:11:01-11:11:02			3			6			9			12		14										
*11:13:01-11:13:02					5					10													23	
*11:14:01-11:14:02		2				6			9			12		14										
*11:15			3		5				9															
*11:16		2				6		8		10		12				16								
*11:17, 11:52, 14:01:01, 14:01:03, 14:08, 14:32:02, 14:34, 14:39, 14:54, 14:58, 14:60, 14:62, 14:70, 14:82, 14:86, 14:88, 14:90, 14:92N, 14:101, 14:112-14:114, 14:117, 14:122					5					10			13										23	
*11:18		2			5					10														
*11:19:01, 11:19:03		2			5				9															
*11:19:02		2			5				9			12					17							
*11:20		2				6	7		9			12				16								
*11:21		2				6				10		12		14										
*11:23, 11:27:01			3		5				9								18							
*11:24			3		5				9													22		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101. 116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		260	170			130	120	160		PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
25		27	28																*11:04:01-11:04:02, 11:04:05-11:04:06, 11:04:08, 11:35, 11:38, 11:43, 11:46:02, 11:54:02, 11:60, 11:77-11:78, 11:92, 11:102:01- 11:102:02
25		27	28																*11:04:03, 11:54:01
25	26	27	28																*11:04:04, 11:46:01
25		27	28				32												*11:04:07
25		27	28					34											*11:06:01, 11:47
25		27	28					34											*11:06:02
25		27	28																*11:07
25		27																	*11:08:01-11:08:02
	26	27																	*11:09, 11:28:02, 11:87
25		27																	*11:11:01-11:11:02
25		27	28																*11:13:01-11:13:02
25		27																	*11:14:01-11:14:02
		27																	*11:15
		27	28		30														*11:16
25																			*11:17, 11:52, 14:01:01, 14:01:03, 14:08, 14:32:02, 14:34, 14:39, 14:54, 14:58, 14:60, 14:62, 14:70, 14:82, 14:86, 14:88, 14:90, 14:92N, 14:101, 14:112-14:114, 14:117, 14:122
25		27	28																*11:18
25		27																	*11:19:01, 11:19:03
25		27					32												*11:19:02
		27																	*11:20
25		27	28		30			34											*11:21
25		27																	*11:23, 11:27:01
		27																	*11:24
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*11:25, 11:84			3		5					10								18						
*11:26					5				9															
*11:27:02-11:27:03			3		5				9						15									
*11:28:01			3		5		7		9															
*11:31		2			5				9															
*11:34, 11:89					5					10														
*11:36						6				10	11	12		14										
*11:37:01-11:37:02, 14:25			3		5				9				13											
*11:40			3			6		8		10		12				16								
*11:41			3			6				10		12	13	14										
*11:42					5					10	11													
*11:44			3		5					10														
*11:45		2			5				9									18						
*11:48		2				6				10		12	13	14										
*11:49:01-11:49:02			3		5				9															
*11:50			3		5					10			13											
*11:51			3						9															
*11:53, 11:105									9															
*11:55			3		5	6				10								18						
*11:56			3		5					10			13											
*11:57					5					10	11													
*11:58:01, 11:113, 11:115			3		5			8		10														
*11:58:02			3		5					10														
*11:59			3			6		8		10		12				16						21		
*11:64					5				9		11							18						
*11:68						6			9		11	12		14										
*11:69						6			9		11													
*11:73		2			5				9			12												
*11:76			3			6				10		12		14										23
*11:79					5				9			12												
*11:82		2				6			9		11													
*11:83			3		5			8		10			13											
*11:85			3			6				10		12		14										
*11:86		2				6						12		14					19					
*11:88			3		5					10														
*11:93			3		5				9			12												
*11:96, 14:53			3		5				9															
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.
						205			255		260				130	120	160		PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
25		27	28																*11:25, 11:84
25		27																	*11:26
25		27																	*11:27:02-11:27:03
		27																	*11:28:01
25		27						33											*11:31
25		27	28																*11:34, 11:89
25		27	28																*11:36
25																			*11:37:01-11:37:02, 14:25
	26	27	28																*11:40
25																			*11:41
25		27	28																*11:42
		27	28													41			*11:44
25		27																	*11:45
25					30														*11:48
		27														41			*11:49:01-11:49:02
																41			*11:50
25		27																	*11:51
25		27																	*11:53, 11:105
25		27	28																*11:55
25																			*11:56
25		27	28					34											*11:57
	26	27	28																*11:58:01, 11:113, 11:115
		27	28																*11:58:02
	26	27	28																*11:59
25		27																	*11:64
25		27																	*11:68
25		27																	*11:69
25		27					32												*11:73
		27	28																*11:76
25		27					32												*11:79
25		27																	*11:82
	26																		*11:83
		27	28													41			*11:85
25		27																	*11:86
25																			*11:88
25		27					32												*11:93
25		27						33											*11:96, 14:53
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.



101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*11:98		2								10														
*11:103									9						15									
*11:107									9				13		15									
*11:114			3		5				9														23	
*11:116			3		5					10														24
*11:118		2				6				10		12				16								
*11:119		2			5					10								18						
*11:120			3		5				9															24
*12:01:01-12:01:04, 12:03:02-12:06, 12:08-12:10, 12:14, 12:17, 12:24N- 12:25, 12:29-12:30, 12:34-12:35																								
*14:01:02, 14:32:01, 14:75					5					10			13											
*14:02, 14:51	1				5	7			9				13		15									
*14:03:01	1				5	7			9		11		13		15			18						
*14:03:02	1				5	7			9		11				15			18						
*14:05:01-14:05:02, 14:23:01, 14:23:03, 14:43, 14:45, 14:91, 14:96, 14:100	1				5					10			13										23	
*14:05:03, 14:103	1				5					10			13											
*14:06:01-14:06:02, 14:81, 14:83, 14:106, 14:108	1				5		8			10			13		15									
*14:07:01-14:07:02					5				9				13										23	
*14:09	1				5	7			9				13											
*14:12:01-14:12:02	1				5		8			10	11		13		15			18						
*14:13	1			4	5	7			9				13		15									
*14:14, 14:36, 14:44:01, 14:44:03	1				5				9				13										23	
*14:16		2				6				10		12	13	14		16								
*14:17, 14:33	1				5		8			10														
*14:18	1				5		8			10			13		15								23	
*14:19	1				5	7			9			12	13		15									
*14:20	1				5					10			13		15									
*14:21	1				5		8			10		12												
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec.	PCR product(s)	
						205			255		260				130	120	160				
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.		
		27	28																	*11:98	
25		27																		*11:103	
25																				*11:107	
		27																		*11:114	
25		27	28																	*11:116	
25		27	28		30															*11:118	
25		27	28																	*11:119	
25		27																		*11:120	
			28	29																*12:01:01-12:01:04, 12:03:02-12:06: 12:08-12:10, 12:14, 12:17, 12:24N- 12:25, 12:29-12:30, 12:34-12:35	
25																				*14:01:02, 14:32:01, 14:75	
																				*14:02, 14:51	
																				*14:03:01	
																				*14:03:02	
25																				*14:05:01-14:05:02, 14:23:01, 14:23:03, 14:43, 14:45, 14:91, 14:96, 14:100	
25																				*14:05:03, 14:103	
																				*14:06:01-14:06:02, 14:81, 14:83, 14:106, 14:108	
25																				*14:07:01-14:07:02	
																				*14:09	
																				*14:12:01-14:12:02	
												37								*14:13	
25																				*14:14, 14:36, 14:44:01, 14:44:03	
25					30															*14:16	
		27	28																	*14:17, 14:33	
																				*14:18	
							32													*14:19	
25																				*14:20	
		27	28				32													*14:21	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.		

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	260	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*14:22			3		5				9				13											
*14:23:02	w				5					10			13										23	
*14:24	1	2				6	7		9		11		13		15									
*14:26					5					10			13										23	
*14:27	1		3		5		7		9				13		15		18							
*14:29	1				5			8		10			13		15									
*14:30	1				5		7		9															
*14:35, 14:72					5					10													23	
*14:37	1	2				6				10	11		13											
*14:38					5					10			13				18							
*14:40, 14:102	1				5				9		11		13		15		18							
*14:41	1				5				9				13		15								23	
*14:42	1				5				9														23	
*14:44:02	1				5				9				13											
*14:47, 14:89	1				5		7		9				13		15		18							
*14:48	1				5		7		9				13		15						22		24	
*14:49					5				9				13		15									
*14:52								8																
*14:55					5					10			13				18						23	
*14:56	1									10			13										23	
*14:57														14		16								
*14:59	1				5			8		10			13										23	
*14:63	1	2		4	5		7		9				13		15		18							
*14:64	1				5			8		10													23	24
*14:65	1			4	5					10													23	
*14:67	1	2			5		7		9				13		15		18							
*14:69					5				9		11		13											
*14:74					5					10	11		13											
*14:77	1				5				9		11		13		15		18						23	
*14:78	1	2		4	5			8		10			13		15		18							
*14:80, 14:121	1				5			8		10			13											
*14:84	1				5					10	11		13				18							
*14:85	1			4	5		7		9		11		13		15		18							
*14:87, 14:104, 14:111										10			13										23	
*14:94	1				5				9				13		15									
*14:95	1				5			8		10													23	
*14:97					5					10			13										23	
*14:98	1						7		9		11		13		15		18							
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec. PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
						205			255		260			130	120	160			*14:22
																			*14:23:02
											36								*14:24
																			*14:26
									34										*14:27
																			*14:29
		27																	*14:30
25	27	28						33											*14:35, 14:72
25																			*14:37
25																			*14:38
25																			*14:40, 14:102
																			*14:41
25	27																		*14:42
25																			*14:44:02
																			*14:47, 14:89
																			*14:48
25																			*14:49
																			*14:52
25																			*14:55
25																			*14:56
					30														*14:57
																			*14:59
					29							37							*14:63
		27	28																*14:64
25	27	28																	*14:65
					29														*14:67
25																			*14:69
25																			*14:74
																			*14:77
					29							37							*14:78
																			*14:80, 14:121
25																			*14:84
												37							*14:85
25																			*14:87, 14:104, 14:111
25																			*14:94
		27	28																*14:95
																41			*14:97
																			*14:98
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Length of spec.	175	200	200	170	220	215	200	190	270	260	210	215	145	150	85	150	220	110	110	180	175	110	115	145
PCR product(s)															235		255	230	205	215	220	175	245	180
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*14:99					5				10				13											23
*14:105			3		5				10				13											23
*14:109	1				5		7		9			12	13		15									24
*14:110					5				10				13											23
*14:115	1				5		7		9		11		13		15		18							24
*14:116	1				5				9		11		13				18							
*14:118					5				10				13											23
*14:119					5				9				13											
*15:10														14		16								
*15:37																								
DRB3*01:14	1								9				13				18					22	23	24
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 430 base pairs, for most wells, or a band of 515 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in order to help in the correct orientation of the DRB1*13 subtyping.

In addition, wells number 6, 13, 15, 20, 27, 30 and 37 contain the primer pair giving rise to the longer, 515 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

²The codon, and in parenthesis the nucleotide, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Codon and 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.

³The codon, and in parenthesis the nucleotide, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Codon and 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.

⁴DRB1*13 alleles in bold lettering are listed as confirmed alleles on the on the IMGT/HLA web page www.ebi.ac.uk/imgt/hla, release 3.7.0, January 2012.

⁵The DRB1*13:92 and 13:98 alleles can be distinguished by the different sizes of the specific PCR products generated by primer mix 36.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

110	140	145	160	155	85	175	215	80	145	150	75	100	70	80	90	115	235	185	Length of spec. PCR product(s)
						205			255		260			130	120	160			Well No.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.
									34										*14:99
25	26																		*14:105
							32												*14:109
																			*14:110
																			*14:115
25																			*14:116
25															40				*14:118
25																			*14:119
			28		30														*15:10
			28										38						*15:37
																			<i>DRB3*01:14</i>
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Well No.

⁶Primer mix 15: Specific PCR fragment of 85 bp in the DRB1*13:15, 13:19, 13:26, 13:53, 13:57, 13:85-13:86 and 13:104 and the DRB1*03:02:02, 03:27, 14:02-14:03:02, 14:06:01-14:06:02, 14:12:01-14:13, 14:18-14:20, 14:24, 14:27, 14:29, 14:40-14:41, 14:47-14:49, 14:51, 14:63, 14:67, 14:77-14:78, 14:81, 14:83, 14:85, 14:89, 14:94, 14:98, 14:102, 14:106, 14:108-14:109 and 14:115 alleles. Specific PCR fragment of 235 bp in the DRB1*13:33:01, 13:61:02, 13:94 and 13:96:01 and the DRB1*03:01:01:01-03:01:01:02, 03:01:03-03:01:16, 03:01:18-03:01:19, 03:04:01-03:05:02, 03:06-03:11:01, 03:12-03:13:01, 03:16, 03:18-03:23, 03:25-03:26, 03:28, 03:30-03:34, 03:36-03:37, 03:39-03:41, 03:43-03:52, 03:54-03:68N, 03:70-03:73, 03:75-03:77, 11:07, 11:27:02-11:27:03, 11:103 and 11:107 alleles. Specific PCR fragments of 85 and 235 bp in DRB1*03:02:01, 03:03 and 03:29, 03:38, 03:53 and 03:74 alleles. Both specific PCR fragments may not be visible.

Primer mix 17: Specific PCR fragment of 220 bp in the DRB1*13:02:02, 13:26, 13:60 and 13:77 and the DRB1*11:01:03, 11:01:10-11:01:11, 11:04:07 and 11:19:02 alleles. Specific PCR fragment of 255 bp in the DRB1*13:28 and the DRB1*03:73 alleles.

Primer mix 18: Specific PCR fragment of 110 bp in the DRB1*13:87 allele. Specific PCR fragment of 230 bp in the DRB1*13:13, 13:18, 13:33:02-13:33:03, 13:47, 13:55, 13:61:01, 13:96:02 and 13:119 and the DRB1*03:01:02, 03:02:02, 03:05:03, 03:11:02, 03:13:02, 03:17, 03:24, 03:27, 03:35, 08:20, 11:23, 11:25, 11:27:01, 11:45, 11:55, 11:64, 11:84, 11:119, 14:03:01-14:03:02, 14:12:01-14:12:02, 14:27, 14:38, 14:40, 14:47, 14:55, 14:63, 14:67, 14:77-14:78, 14:84-14:85, 14:89, 14:98, 14:102 and 14:115-14:116 and in the DRB3*01:14 alleles.

Primer mix 19: Specific PCR fragment of 110 bp in the DRB1*13:87 allele. Specific PCR fragment of 205 bp in the DRB1*13:74 allele. Specific PCR fragment of 260 bp in the DRB1*13:16 and in the DRB1*11:86 alleles.

Primer mix 20: Specific PCR fragment of 180 bp in the DRB1*13:73 allele.

Specific PCR fragment of 215 bp in the DRB1*13:17, 13:67, 13:73 and 13:116 and the DRB1*08:40 and the DRB3*02:27 alleles.

Primer mix 21: Specific PCR fragment of 175 bp in the DRB1*13:27, 13:41 and 13:71 and the DRB1*03:76 and 11:59 alleles.

Specific PCR fragment of 220 bp in the DRB1*13:103 allele.

Primer mix 22: Specific PCR fragment of 110 bp in the DRB1*13:68 and the 11:24 alleles.

Specific PCR fragment of 175 bp in the DRB1*13:31, 13:46, 13:54, 13:77 and 13:100 and the DRB1*03:38 and 14:48 and in the DRB3*01:14 alleles.

101.116-24/03 – including *Taq* pol., IFU-01
101. 116-24u/03u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: 51N**Lot-specific information**

Primer mix 23: Specific PCR fragment of 115 bp in the DRB1*13:34 and 13:64 and the DRB1*03:43, 03:71, 11:76, 11:114, 14:41 and 14:77 and in the DRB3*01:14 alleles. Specific PCR fragment of 245 bp in the DRB1*13:01:03, 13:28 and 13:76 and the DRB1*03:01:17, 03:73, 11:01:05, 11:01:10, 11:04:03, 11:06:02, 11:13:01-11:13:02, 11:17, 11:52, 11:54:01, 14:01:01, 14:01:03, 14:05:01-14:05:02, 14:07:01-14:08, 14:14, 14:18, 14:23:01-14:23:03, 14:26, 14:32:02, 14:34-14:36, 14:39, 14:42-14:44:01, 14:44:03-14:45, 14:54-14:56, 14:58-14:60, 14:62, 14:64-14:65, 14:70, 14:72, 14:82, 14:86-14:88, 14:90-14:92N, 14:95-14:97, 14:99-14:101, 14:104-14:105, 14:111-14:114, 14:117-14:118 and 14:122 alleles. Specific PCR fragment of 115 and 245 bp in the DRB1*14:110 allele.

Primer mix 24: Specific PCR fragment of 145 bp in the DRB1*13:35 allele. Specific PCR fragment of 180 bp in the DRB1*13:39, 13:54, 13:77-13:79 and 13:100 and the DRB1*03:13:01-03:13:02, 03:38, 11:116, 11:120, 14:48, 14:64, 14:109 and 14:115 and in the DRB3*01:14 alleles.

Primer mix 31: Specific PCR fragment of 175 bp in the DRB1*13:59 allele. Specific PCR fragment of 205 bp in the DRB1*13:72 allele.

Primer mix 34: Specific PCR fragment of 145 bp in the DRB1*13:80 and the DRB1*03:16 alleles.

Specific PCR fragment of 255 bp in the DRB1*13:58 and 13:81 and the DRB1*03:20, 11:06:01-11:06:02, 11:21, 11:47, 11:57, 14:29 and 14:99 alleles.

Primer mix 36: Specific PCR fragment of 75 bp in the DRB1*13:92 and the DRB1*14:26 alleles. Specific PCR fragment of 170 bp in the DRB1*13:90 allele. Specific PCR fragment of 260 bp in the DRB1*13:98 allele.

Primer mix 39: Specific PCR Specific PCR fragment of of 80 bp in the DRB1*13:102 allele. Specific PCR Specific PCR fragment of of 130 bp in the DRB1*13:95 allele.

Primer mix 40: Specific PCR fragment of 90 bp in the DRB1*13:101 allele. Specific PCR fragment of 120 bp in the DRB1*13:91 allele. Specific PCR fragment of 155 bp in the DRB1*13:99 and the DRB1*14:118 alleles.

Primer mix 41: Specific PCR fragment of 115 bp in the DRB1*13:106 and in the DRB1*03:26, 03:33, 03:44, 11:44, 11:49:01-11:50, 11:85 and 14:97 alleles. Specific PCR fragment of 160 bp in the DRB1*13:113N allele.

‘w’, may be weakly amplified.

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

CELL LINE VALIDATION SHEET																				
DRB1*13 SSP subtyping kit																				
					Well															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					201077601	201077602	201077603	201077604	201077605	201077606	201298807	201077608	201298809	201077610	201077611	201077612	201077613	201077614	201077615	201077616
				Prod. No.:																
	IHWC cell line		DRB1																	
1	9001	SA	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*15:02	*04:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*15:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*03:01		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
5	9009	KAS011	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*04:07	*08:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*03:01		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
10	9107	LKT3	*04:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*09:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*11:01		-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:01	*13:01	+	+	-	-	-	+	-	+	-	+	-	+	-	-	+	+
18	9257	32367	*09:01	*11:01	-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
19	9038	BM16	*12:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*13:02		+	+	-	-	-	+	+	-	+	-	-	+	-	-	-	+
21	9064	AMALA	*14:02		+	-	-	-	+	-	+	-	+	-	-	+	-	+	-	+
22	9056	KOSE	*13:02	*14:54	+	+	-	-	+	+	+	-	+	+	-	+	+	-	-	+
23	9124	IHL	*08:03	*14:14	+	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
24	9035	JBUSH	*11:01		-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
25	9049	IBW9	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*03:01		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
27	9191	CH1007	*04:05	*10:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*04:16	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*03:02		+	-	-	-	-	-	+	-	+	-	-	-	+	-	+	-
31	9019	DUCAF	*03:01		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
32	9297	HAG	*13:03		+	+	-	+	+	-	-	-	+	-	-	+	+	-	-	-
33	9098	MT14B	*04:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*11:01		-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
35	9302	SSTO	*04:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*04:03	*04:06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*13:01		+	+	-	-	-	+	-	+	-	+	-	+	-	-	-	+
38	9099	LZL	*14:02		+	-	-	-	+	-	+	-	+	-	-	-	+	-	+	-
39	9315	CML	*03:01	*04:01	+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
40	9134	WHONP199	*07:01	*09:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*13:02		+	+	-	-	-	+	+	-	+	-	-	+	-	-	-	+
42	9066	TAB089	*08:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*09:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*14:01		-	-	-	-	+	-	-	-	-	+	-	-	+	-	-	-
45	9239	SHJO	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*15:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*11:04	*12:01	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-
48	9303	TER-ND	*01:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

CELL LINE VALIDATION SHEET																							
DRB1*13 SSP subtyping kit																							
				Well																			
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32				
				Prod. No.:	201077617	201077618	201077619	201077620	201077621	201077622	201077623	201077624	201077625	201077626	201077627	201077628	201077629	201298830	201077631	201077632			
IHC cell line		DRB1																					
1	9001	SA	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2	9280	LK707	*15:02	*04:05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
3	9011	E4181324	*15:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4	9275	GU373	*03:01		-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-			
5	9009	KAS011	*16:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
6	9353	SM	*04:07	*08:03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7	9020	QBL	*03:01		-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-			
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
9	9026	YAR	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-			
10	9107	LKT3	*04:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11	9051	PITOUT	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
12	9052	DBB	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
13	9004	JESTHOM	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
14	9071	OLGA	*08:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
15	9075	DKB	*09:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
16	9037	SWEIG007	*11:01		-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-			
17	9282	CTM3953540	*03:01	*13:01	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	-			
18	9257	32367	*09:01	*11:01	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-			
19	9038	BM16	*12:01		-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-			
20	9059	SLE005	*13:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-			
21	9064	AMALA	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
22	9056	KOSE	*13:02	*14:54	-	-	-	-	-	-	+	-	+	-	+	-	-	-	-	-			
23	9124	IHL	*08:03	*14:14	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-			
24	9035	JBUSH	*11:01		-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-			
25	9049	IBW9	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
26	9285	WT49	*03:01		-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-			
27	9191	CH1007	*04:05	*10:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
28	9320	BEL5GB	*04:16	*07:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
29	9050	MOU	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
30	9021	RSH	*03:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
31	9019	DUCAF	*03:01		-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-			
32	9297	HAG	*13:03		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+			
33	9098	MT14B	*04:04		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
34	9104	DHIF	*11:01		-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-			
35	9302	SSTO	*04:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
36	9024	KT17	*04:03	*04:06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
37	9065	HHKB	*13:01		-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-			
38	9099	LZL	*14:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
39	9315	CML	*03:01	*04:01	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-			
40	9134	WHONP199	*07:01	*09:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
41	9055	H0301	*13:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-			
42	9066	TAB089	*08:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
43	9076	T7526	*09:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
44	9057	TEM	*14:01		-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-			
45	9239	SHJO	*07:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
46	9013	SCHU	*15:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-			
47	9045	TUBO	*11:04	*12:01	-	-	-	-	-	-	-	-	+	-	+	+	+	-	-	-			
48	9303	TER-ND	*01:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

CELL LINE VALIDATION SHEET															
DRB1*13 SSP subtyping kit															
				Well											
				33	34	35	36	37	38	39	40	41	42	43	
				Prod. No.:	201077633	201077634	201077635	201077636	201077637	201077638	201077639	201077640	201298841	201298842	201298843
	IHWC cell line		DRB1												
1	9001 SA		*01:01		-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707		*15:02	*04:05	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*15:02		-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373		*03:01		-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*16:01		-	-	-	-	-	-	-	-	-	-	-
6	9353 SM		*04:07	*08:03	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL		*03:01		-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU		*04:01		-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR		*04:02		-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3		*04:05		-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT		*07:01		-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB		*07:01		-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM		*01:01		-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA		*08:02		-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*09:01		-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007		*11:01		-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540		*03:01	*13:01	-	-	-	-	-	-	-	-	-	-	-
18	9257 32367		*09:01	*11:01	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16		*12:01		-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*13:02		-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA		*14:02		-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*13:02	*14:54	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL		*08:03	*14:14	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH		*11:01		-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9		*07:01		-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*03:01		-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007		*04:05	*10:01	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB		*04:16	*07:01	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU		*07:01		-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH		*03:02		-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF		*03:01		-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG		*13:03		-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B		*04:04		-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF		*11:01		-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO		*04:03		-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17		*04:03	*04:06	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB		*13:01		-	-	-	-	-	-	-	-	-	-	-
38	9099 LZL		*14:02		-	-	-	-	-	-	-	-	-	-	-
39	9315 CML		*03:01	*04:01	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199		*07:01	*09:01	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301		*13:02		-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089		*08:03		-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*09:01		-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*14:01		-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO		*07:01		-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU		*15:01		-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*11:04	*12:01	-	-	-	-	-	-	-	-	-	-	-
48	9303 TER-ND		*01:03		-	-	-	-	-	-	-	-	-	-	-

101.116-24/03 – including *Taq* pol., IFU-01
 101.116-24u/03u – without *Taq* pol., IFU-02

Visit www.olerup-ssp.com for
 “Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP® DRB1*13 SSP

Product number: 101.116-24/03 – including *Taq* pol.
 101.116-24u/03u – without *Taq* pol.

Lot number: 51N

Expiry date: 2014-September- 01

Number of tests: 24 tests – Product No. 101.116-24
 3 tests – Product No. 101.116-03

Number of wells per test: 43

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2010-776-01	17	2010-776-17	33	2010-776-33
2	2010-776-02	18	2010-776-18	34	2010-776-34
3	2010-776-03	19	2010-776-19	35	2010-776-35
4	2010-776-04	20	2010-776-20	36	2010-776-36
5	2010-776-05	21	2010-776-21	37	2010-776-37
6	2010-776-06	22	2010-776-22	38	2010-776-38
7	2012-988-07	23	2010-776-23	39	2010-776-39
8	2010-776-08	24	2010-776-24	40	2010-776-40
9	2012-988-09	25	2010-776-25	41	2012-988-41
10	2010-776-10	26	2010-776-26	42	2012-988-42
11	2010-776-11	27	2010-776-27	43	2012-988-43
12	2010-776-12	28	2010-776-28		
13	2010-776-13	29	2010-776-29		
14	2010-776-14	30	2012-988-30		
15	2010-776-15	31	2010-776-31		
16	2010-776-16	32	2010-776-32		

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 17, 19 to 21, 24, 31, 33 to 36 and 38 to 43 were available. The specificities of the primers in primer solution 17, 20, 21, 24, 31, 33, 34, 38 and 41 were tested by separately adding additional 5'-primers or 3'-primers. In primer solutions 19, 35, 36, 39 and 40 it was only possible to test the 5'-primer, the 3'-primers were not possible to test. In primer solutions 42 and 43 it was only possible to test the 3'-primer, the 5'-primers were not possible to test. In primer solution 20, 21, 26 and 31 one of the 5'-primers was not possible to test. One of the 3'-primers in primer solutions 7, 9, 17, 18, 22 to 24, 27, 34 and 41 was not possible to test.

Additional primers in primer solutions 2, 5, 6, 11, 12, 14, 18, 23 and 32 were tested by separately adding one 5'-primer and/or one 3'-primer.

101.116-24/03 – including *Taq* pol., IFU-01
101. 116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

Results: No false positive or false negative amplifications were obtained.

Date of approval: 2012-March-27

Approved by:

Production Quality Control

101.116-24/03 – including *Taq* pol., IFU-01
101. 116-24u/03u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

Declaration of Conformity

Product name: *Olerup* SSP® DRB1*13
Product number: 101.116-24/24u, -03/03u
Lot number: 51N

Intended use: DRB1*13 high resolution histocompatibility testing

Manufacturer: *Olerup* SSP AB
Franzengatan 5
SE-112 51 Stockholm, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Stockholm, Sweden
2012-March-27

Ann-Cathrin Jareman
Head of QA and Regulatory Affairs

101.116-24/03 – including *Taq* pol., IFU-01
101. 116-24u/03u – without *Taq* pol., IFU-02

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Lot No.: **51N**

Lot-specific information

101.116-24/03 – including *Taq* pol., IFU-01
101. 116-24u/03u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **51N**

Lot-specific information

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