

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

Olerup SSP® HLA-B*08

Product number:	101.513-24/04 – including <i>Taq</i> pol. 101.513-24u/04u – without <i>Taq</i> pol.
Lot number:	3N4
Expiry date:	2025-08-01
Number of tests:	24 tests – Product No. 101.513-24/24u 4 tests – Product No. 101.513-04/04u
Number of wells per test:	47+1
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. 3N4.

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

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® HLA-B*08 LOT (3K4)

- The product documentation has been updated for new alleles of IMGT 3.44.0
- The kit resolution focuses on common and well documented (CWD) alleles¹.

¹As described in section Uniquely Identified Alleles.

The HLA-B*08 primer set, specificity and interpretation tables have been updated for the HLA-C alleles described since the previous *Olerup SSP®* HLA-B*08 lot was made (**Lot No. 3K4**).

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

Well	5'-primer	3'-primer	rationale
6	-	Added	3'-primer added for the *08:88 allele.
29	-	Added	3'-primer added for the *08:88 allele.
40	-	Added	3'-primer added for the *08:75 allele.
44	-	Added	3'-primer added for the *08:67:02N allele.

¹S. J. Mack, P. Cano, J. A. Hollenbach et al.
Common and well-documented HLA alleles: 2012 update to
the CWD catalogue. Tissue Antigens, 2013, 81, 194–203

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Well **48** contains Negative Control primer pairs, that will amplify a majority of the Olerup SSP® HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs. The PCR products generated by the positive control primer pair is 200 base pairs.

Length of PCR product	105	200	105	80	75	80	85
5'-primer¹	164	340	440	45	45	43	36
	5'-CAC3'	5'-Agg3'	5'-TTA3'	5'-Tgg3'	5'-Tgg3'	5'-Tgg3'	5'-TAC3'
							36
							5'-TAT3'
3'-primer²	231	2nd I	507	59	58	57	47
	5'-TgC3'	5'-AAA3'	5'-TTg3'	5'-CTC3'	5'-ggC3'	5'-CTC3'	5'-ACA3'
							48
							5'-gCA3'
							48
							5'-gCC3'
							52
							5'-TgT3'
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

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

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



0197

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Lot-specific information

PRODUCT DESCRIPTION

HLA-B*08 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*08:01 to B*08:272 alleles.

PLATE LAYOUT

Each test consists of 48 PCR reactions in a 48 well cut PCR plate.

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	44	45	46	47	NC

The 48 well cut PCR plate is marked with ‘HLA-B*08’ in silver/gray ink.

Well No. 1 is marked with the Lot No. ‘3N4’.

Wells 1 to 47 – HLA-B*08 high resolution primers.

Well 48 – Negative Control (NC).

A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays, and should be disregarded. The PCR plates are 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

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

UNIQUELY IDENTIFIED ALLELES

All the HLA-B*08 alleles, i.e. **B*08:01 to B*08:272**, recognized by the HLA Nomenclature Committee in April 2021^{1,2} will be amplified by the primers in the HLA-B*08 subtyping kit³.

The HLA-B*08 kit enables separation of the confirmed HLA-B*08 alleles as listed in the IMGT/HLA database 3.24.0. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for HLA-B*08 alleles is listed below.



0197

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Lot No.: **3N4**

Lot-specific information

The HLA-B*08 kit also enables identification of many null and alternatively expressed alleles.

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

Alleles	Primer mix	Alleles	Primer mix
B*08:11, 08:76	13	B*08:45, 08:59:01-08:59:02	34
B*08:19N, 08:109	22	B*08:51, 08:57	35
B*08:21, 08:47	23	B*08:58, 08:61	38
B*08:29, B*08:30	27	B*08:68, 08:69	45
B*08:33, 08:53:01-08:53:02	36	B*08:101, 08:128	24
B*08:41, 08:48	37	B*08:104, 08:140	46
B*08:44, 08:145	19		

¹HLA-B alleles listed on the IMGT/HLA web page 2021-April-20, release 3.44.0, www.ebi.ac.uk/imgt/hla.

²Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page <http://hla.alleles.org/alleles/deleted.html>.

³The following alleles will give rise to identical amplification patterns with the HLA-B*08 subtyping kit. These alleles can be distinguished by the HLA-B low resolution kit and/or the respective high resolution subtyping kits:

Alleles

B*08:156, B*15:180

B*08:242, B*41:46, B*42:26

B*08:272, B*35:87



0197

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Lot-specific information

ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
B*08:01:01	Confirmed	B*08:17	Unconfirmed	B*08:62	Confirmed	B*08:112	Unconfirmed
B*08:01:02	Confirmed	B*08:18	Confirmed	B*08:63	Confirmed	B*08:113	Confirmed
B*08:01:03	Unconfirmed	B*08:19N	Unconfirmed	B*08:64	Unconfirmed	B*08:114	Unconfirmed
B*08:01:04	Confirmed	B*08:20	Confirmed	B*08:65	Unconfirmed	B*08:115	Unconfirmed
B*08:01:05	Confirmed	B*08:21	Unconfirmed	B*08:66	Unconfirmed	B*08:116	Unconfirmed
B*08:01:06	Unconfirmed	B*08:22	Unconfirmed	B*08:67N	Unconfirmed	B*08:117	Unconfirmed
B*08:01:07	Confirmed	B*08:23	Confirmed	B*08:68	Unconfirmed	B*08:118	Unconfirmed
B*08:01:08	Confirmed	B*08:24	Confirmed	B*08:69	Unconfirmed	B*08:119	Unconfirmed
B*08:01:09	Unconfirmed	B*08:25	Confirmed	B*08:70	Confirmed	B*08:120	Unconfirmed
B*08:01:10	Confirmed	B*08:26:01	Unconfirmed	B*08:71	Confirmed	B*08:121	Unconfirmed
B*08:01:11	Unconfirmed	B*08:26:02	Unconfirmed	B*08:72N	Unconfirmed	B*08:122	Unconfirmed
B*08:01:12	Unconfirmed	B*08:26:03	Unconfirmed	B*08:73	Unconfirmed	B*08:123	Unconfirmed
B*08:01:13	Confirmed	B*08:27	Unconfirmed	B*08:74	Unconfirmed	B*08:124	Unconfirmed
B*08:01:14	Unconfirmed	B*08:28	Confirmed	B*08:75	Unconfirmed	B*08:125	Unconfirmed
B*08:01:15	Confirmed	B*08:29	Unconfirmed	B*08:76	Unconfirmed	B*08:126	Unconfirmed
B*08:01:16	Unconfirmed	B*08:30N	Unconfirmed	B*08:77	Unconfirmed	B*08:127	Unconfirmed
B*08:01:17	Confirmed	B*08:31	Unconfirmed	B*08:78	Confirmed	B*08:128	Confirmed
B*08:01:18	Unconfirmed	B*08:32	Unconfirmed	B*08:79	Confirmed	B*08:129	Unconfirmed
B*08:01:19	Unconfirmed	B*08:33	Confirmed	B*08:80	Unconfirmed	B*08:130	Unconfirmed
B*08:01:20	Unconfirmed	B*08:34	Unconfirmed	B*08:81	Unconfirmed	B*08:131	Unconfirmed
B*08:01:21	Confirmed	B*08:35	Confirmed	B*08:82N	Unconfirmed	B*08:132	Confirmed
B*08:01:22	Unconfirmed	B*08:36	Unconfirmed	B*08:83	Unconfirmed	B*08:133	Unconfirmed
B*08:01:23	Unconfirmed	B*08:37	Confirmed	B*08:84	Confirmed	B*08:134	Unconfirmed
B*08:01:24	Unconfirmed	B*08:38	Unconfirmed	B*08:85	Unconfirmed	B*08:135	Confirmed
B*08:01:25	Unconfirmed	B*08:39	Confirmed	B*08:86N	Unconfirmed	B*08:136	Confirmed
B*08:01:26	Unconfirmed	B*08:40	Confirmed	B*08:87	Unconfirmed	B*08:137	Confirmed
B*08:01:27	Unconfirmed	B*08:41	Confirmed	B*08:88	Unconfirmed	B*08:138	Unconfirmed
B*08:01:28	Unconfirmed	B*08:42	Unconfirmed	B*08:89	Unconfirmed	B*08:139	Unconfirmed
B*08:01:29	Confirmed	B*08:43	Unconfirmed	B*08:90	Unconfirmed	B*08:140	Confirmed
B*08:01:30	Confirmed	B*08:44	Unconfirmed	B*08:91	Unconfirmed	B*08:141	Unconfirmed
B*08:01:31	Unconfirmed	B*08:45	Unconfirmed	B*08:92	Unconfirmed	B*08:142	Unconfirmed
B*08:01:32	Unconfirmed	B*08:46	Unconfirmed	B*08:93	Unconfirmed	B*08:143	Unconfirmed
B*08:01:33	Unconfirmed	B*08:47	Confirmed	B*08:94	Confirmed	B*08:144	Unconfirmed
B*08:01:34	Unconfirmed	B*08:48	Unconfirmed	B*08:95	Unconfirmed	B*08:145	Confirmed
B*08:02	Confirmed	B*08:49	Unconfirmed	B*08:96	Unconfirmed	B*08:146	Unconfirmed
B*08:03	Confirmed	B*08:50	Unconfirmed	B*08:97	Unconfirmed	B*08:147	Unconfirmed
B*08:04	Confirmed	B*08:51	Unconfirmed	B*08:98	Unconfirmed	B*08:148N	Unconfirmed
B*08:05	Unconfirmed	B*08:52	Confirmed	B*08:99	Unconfirmed	B*08:149	Unconfirmed
B*08:07	Unconfirmed	B*08:53:01	Confirmed	B*08:100	Confirmed	B*08:150	Confirmed
B*08:08N	Confirmed	B*08:53:02	Unconfirmed	B*08:101	Confirmed	B*08:151	Unconfirmed
B*08:09	Confirmed	B*08:54	Unconfirmed	B*08:102	Unconfirmed	B*08:152	Unconfirmed
B*08:10	Unconfirmed	B*08:55	Unconfirmed	B*08:103	Unconfirmed	B*08:153	Unconfirmed
B*08:11	Unconfirmed	B*08:56:01	Confirmed	B*08:104	Confirmed	B*08:154	Unconfirmed
B*08:12:01	Confirmed	B*08:56:02	Confirmed	B*08:105	Confirmed	B*08:155	Unconfirmed
B*08:12:02	Unconfirmed	B*08:57	Unconfirmed	B*08:106	Unconfirmed	B*08:156	Unconfirmed
B*08:12:03	Confirmed	B*08:58	Unconfirmed	B*08:107	Unconfirmed	B*08:157	Unconfirmed
B*08:13	Confirmed	B*08:59:01	Confirmed	B*08:108	Confirmed	B*08:158	Unconfirmed
B*08:14	Unconfirmed	B*08:59:02	Unconfirmed	B*08:109	Unconfirmed	B*08:159	Unconfirmed
B*08:15	Unconfirmed	B*08:60	Confirmed	B*08:110	Confirmed	B*08:160	Unconfirmed
B*08:16	Confirmed	B*08:61	Unconfirmed	B*08:111	Unconfirmed	B*08:161	Unconfirmed

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2016-April-15, release 3.24.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

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



0197

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SPECIFICITY TABLE

HLA-B*08 SSP subtyping

Specificities and sizes of the PCR products of the 47+1 primer mixes used for
HLA-B*08 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*08 alleles ³	Other amplified HLA Class I alleles ⁴
1	215 bp	800 bp	*08:01:01:01-08:05, 08:07-08:08N, 08:10-08:11, 08:14-08:15, 08:17-08:19N, 08:21-08:24, 08:26:01-08:39, 08:41-08:48, 08:50-08:54:02, 08:56:01-08:59:02, 08:61-08:69, 08:71-08:78, 08:80-08:83, 08:85-08:88, 08:90-08:106, 08:108-08:128, 08:130-08:142, 08:144-08:155, 08:157-08:170, 08:172-08:180, 08:182-08:183, 08:185-08:204, 08:206-08:231, 08:233-08:253, 08:256-08:272	*07:04:01-07:04:02, 07:19, 07:25, 07:146, 07:349, 35:87, 37:09, 41:02:01:01-41:02:09, 41:04, 41:10-41:11, 41:13, 41:15, 41:18-41:19, 41:23-41:24, 41:27, 41:31, 41:36, 41:38-41:43, 41:45N-41:47, 41:49, 41:51-41:52, 41:55, 41:58, 41:65, 41:68-41:69, 42:01:01:01-42:02:02, 42:05:01-42:12, 42:14-42:18, 42:20-42:29, 44:106, 44:158, 44:166, 44:213
2	215 bp	800 bp	*08:01:01:01-08:03, 08:05, 08:07-08:16, 08:18-08:25, 08:27-08:49, 08:51-08:53:02, 08:55-08:61, 08:63-08:64, 08:66-08:84, 08:86N-08:93, 08:95-08:109, 08:111-08:122, 08:124-08:131, 08:133-08:145, 08:147-08:225, 08:227, 08:229-08:238, 08:240-08:241, 08:243-08:262, 08:264, 08:266-08:271	*15:180, 35:218, 35:256, 51:68, 51:176, C*06:147
3	245 bp	1070 bp	*08:01:01:01-08:01:56, 08:04:01-08:05, 08:07-08:14, 08:16-08:25, 08:27-08:49, 08:51, 08:53:01-08:61, 08:63-08:77, 08:79-08:93, 08:95-08:116, 08:118-08:125, 08:127-08:130, 08:132-08:138, 08:140-08:225, 08:227-08:228, 08:230-08:238, 08:240-08:241, 08:243-08:254, 08:256-08:262, 08:264-08:270Q	*07:29, 07:186, 07:383, 14:28, 15:142, 15:180, 15:429, 35:218, 35:256, 39:12:01:01-39:12:01:02, 40:328, C*06:147, C*07:124, C*07:155



0197

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Lot No.: **3N4**

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4	245 bp	1070 bp	*08:02, 08:113, 08:117, 08:255, 08:271	*13:93, 38:84, 44:49, 44:156
5	205 bp 245 bp	1070 bp	*08:148N *08:03, 08:23, 08:52, 08:54:01-08:54:02, 08:78, 08:110, 08:133	*15:142, 15:429, 35:218, 35:256, 40:328, 49:25, 51:68, 51:176, 52:77, 57:49, C*06:147
6⁴	110 bp 170 bp 205 bp	1070 bp	*08:88, 08:102 *08:97 *08:04:01-08:04:02, 08:17, 08:24, 08:54:01- 08:54:02, 08:110	*40:328, 44:49, 49:25 C*07:01:06 *13:93, 15:142, 15:429, 37:62, 40:328, 44:49, 44:156, 49:25, 52:77
7⁵	215 bp 250 bp	1070 bp	*08:05 *08:03, 08:36, 08:78	*49:25, 51:68, 51:176, 52:77, 57:49, C*07:377
8⁶	170 bp	1070 bp	*08:20:01-08:20:02, 08:40, 08:70, 08:79	*07:05:01:01-07:06:05, 07:32, 07:40, 07:53, 07:69, 07:78, 07:90, 07:97, 07:105, 07:112, 07:123, 07:137- 07:138, 07:140, 07:176, 07:182N, 07:201N, 07:206-07:207, 07:210, 07:213-07:214, 07:222, 07:249, 07:258, 07:262, 07:264, 07:269- 07:270, 07:278, 07:283, 07:287, 07:293, 07:304, 07:317, 07:324, 07:327, 07:332-07:333, 07:340, 07:352-07:353, 07:356-07:358, 07:368, 07:378, 07:387, 07:389, 07:395, 07:399, 07:408, 13:18, 13:31, 13:41, 13:73, 13:128, 13:131, 13:145, 15:30:01:01-15:30:01:03, 15:58, 15:73:01:01-15:73:01:02, 15:150, 15:303, 15:324, 15:453, 15:486, 15:541, 35:18, 35:44, 35:413, 39:08, 39:11, 39:18, 39:33, 39:36, 40:15-40:16:01:02, 40:23, 40:128, 40:161, 40:198, 40:324, 40:466, 41:62, 46:61, 46:74, 48:05, 48:19, 51:05, 51:29, 51:54, 51:61:01-51:61:02, 51:82, 51:217, 51:279, 52:21:01-52:21:02, 52:24, 52:97, 54:10, 54:20, 54:33, 54:40, 55:09, 55:21, 55:37, 55:52, 56:43, 56:51, 56:63, 57:02:01:01-57:02:02, 57:12, 57:28N, 57:42, 57:63, C*01:90, C*01:116, C*02:68, C*05:238, C*12:282, C*14:92
9⁴	115 bp	1070 bp	*08:49, 08:71, 08:255	*13:46, 13:154, 15:51, 15:83:01:01- 15:83:01:02, 15:179:01-15:179:02, 15:199, 15:218Q, 15:518, 15:578, 18:56, 18:113, 27:47, 27:127, 35:38, 35:115, 35:169, 37:01:01:01- 37:01:16, 37:01:18-37:01:26, 37:03N-37:06:02, 37:08, 37:10- 37:11, 37:13-37:38, 37:41-37:65, 37:67-37:80, 37:82N, 37:84-37:93,



0197

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165 bp

*08:07, 08:37, 08:89,
08:107

37:95, 38:30, 39:156, 41:24, 42:10,
42:17, 44:02:01:01-44:02:72,
44:05:01:01-44:06, 44:08-44:09,
44:11-44:12, 44:14-44:25,
44:27:01:01-44:27:04, 44:33-
44:34:02, 44:41:01-44:42, 44:44,
44:48-44:49, 44:51-44:52N, 44:55,
44:58N-44:59:02, 44:62-44:63,
44:66-44:68, 44:70-44:73, 44:75,
44:78, 44:80, 44:83-44:84:02, 44:86-
44:91, 44:93, 44:95, 44:97, 44:99-
44:102, 44:104, 44:106, 44:112-
44:113, 44:116-44:119, 44:123,
44:126:01-44:127, 44:131-44:134,
44:136-44:140, 44:142, 44:145,
44:148-44:149N, 44:151-44:152,
44:158, 44:162, 44:168-44:173,
44:176-44:177, 44:179, 44:185,
44:187, 44:190-44:191, 44:195N-
44:196, 44:200-44:201, 44:206,
44:208, 44:211-44:214, 44:216-
44:221, 44:225-44:226, 44:229-
44:230, 44:235-44:236, 44:238,
44:240-44:244, 44:249, 44:253-
44:255, 44:257, 44:260-44:265,
44:267N, 44:269-44:270:02, 44:273-
44:274, 44:279, 44:287-44:289,
44:291-44:293, 44:296-44:297,
44:301, 44:303N, 44:306N, 44:308,
44:311-44:316, 44:320-44:322,
44:326-44:327, 44:329-44:331,
44:334N-44:335, 44:337-44:338,
44:341N-44:342, 44:344, 44:437,
44:439, 44:441-44:442, 44:445-
44:446, 44:448N-44:449N, 44:451-
44:453, 44:455, 44:457, 44:461-
44:465, 44:467-44:468, 44:470,
44:473, 44:477-44:480Q, 44:482,
44:484, 44:492, 44:494-44:495,
44:497-44:499, 44:502-44:505,
45:01:01:01-45:25, 51:08:01:01-
51:08:04, 51:20, 51:36, 51:44N,
51:97, 51:141, 51:153, 51:263,
51:274-51:275, 52:19, 53:22, 55:56,
56:13, 57:09, 57:24, 57:119,
82:01:01:01-82:04, 83:01, **C*07:896**
*07:04:01-07:04:02, 07:19, 07:25,
07:146, 15:51, 15:179:01-15:179:02,
15:199, 15:218Q, 15:518, 18:56,
18:113, 35:38, 35:115, 35:169,
35:260, 37:09, 37:35, 37:56, 37:77,
41:04, 41:18, 41:21, 41:51, 41:63,
42:09, 42:16, 44:17, 44:51, 44:123,
44:230, 45:09, 53:22, 57:24, 57:119,
C*07:626



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

10⁴	85 bp 170 bp	800 bp	*08:40, 08:165, 08:171, 08:205 *08:08N	*07:388, 27:83, 41:19
11	290 bp	800 bp	*08:09, 08:27, 08:84, 08:254	*41:01:01:01-41:01:07, 41:05, 41:07, 41:12, 41:14, 41:16-41:17, 41:20- 41:22, 41:25-41:26, 41:28, 41:30, 41:33-41:35, 41:37, 41:44, 41:50, 41:53-41:54, 41:56Q-41:57, 41:59- 41:61, 41:64, 41:66-41:67, 42:04, 55:20
12	385 bp	1070 bp	*08:10	*39:78
13⁴	85 bp 290 bp	1070 bp	*08:11 *08:49, 08:60, 08:76, 08:129, 08:181	*41:48, 42:13, 44:342, 53:15
14⁴	115 bp 280 bp	1070 bp	*08:43 *08:12:01-08:12:03, 08:16, 08:49, 08:89, 08:107, 08:129	*15:516, 15:576, 41:03:01-41:03:02, 41:48, 41:63, 42:13, 44:342, 53:15
15⁴	75 bp	1070 bp	*08:01:01:01-08:05, 08:07-08:25, 08:27-08:49, 08:50 ^w , 08:51-08:55, 08:57-08:61, 08:62 ^w , 08:63-08:65, 08:67:01N- 08:93, 08:96:01-08:101, 08:103-08:121, 08:123- 08:150, 08:152-08:179, 08:181-08:189, 08:191- 08:225, 08:227-08:238, 08:240-08:241, 08:243- 08:262, 08:263 ^w , 08:264- 08:271	*07:29, 07:86 ^w , 07:352 ^w , 14:11 ^w , 14:28, 15:03:01:01 ^w -15:03:13 ^w , 15:09:01 ^w -15:10:07 ^w , 15:18:01:01 ^w - 15:18:06 ^w , 15:18:08 ^w -15:18:09 ^w , 15:23 ^w , 15:29:01:01 ^w -15:29:01:02 ^w , 15:37 ^w , 15:47:01 ^w -15:47:02 ^w , 15:49 ^w , 15:51 ^w -15:52 ^w , 15:54 ^w , 15:61 ^w -15:62 ^w , 15:64:01 ^w -15:64:02 ^w , 15:69 ^w , 15:72 ^w , 15:74 ^w , 15:80 ^w , 15:90 ^w -15:91 ^w , 15:93 ^w , 15:98 ^w - 15:99 ^w , 15:103 ^w , 15:108 ^w , 15:114 ^w - 15:115 ^w , 15:119 ^w , 15:123 ^w -15:124 ^w , 15:127 ^w , 15:131 ^w -15:134 ^w , 15:151 ^w , 15:153 ^w , 15:156 ^w , 15:158 ^w , 15:161 ^w , 15:173 ^w , 15:176 ^w , 15:180, 15:186 ^w , 15:197:01 ^w -15:198 ^w , 15:200 ^w , 15:210 ^w , 15:220:01:01 ^w -15:221 ^w , 15:226N ^w , 15:229 ^w , 15:235 ^w , 15:238 ^w , 15:242:01 ^w -15:243 ^w , 15:251:01 ^w -15:253 ^w , 15:255 ^w , 15:263 ^w , 15:266 ^w , 15:274 ^w - 15:275:02 ^w , 15:281 ^w -15:282 ^w , 15:290 ^w , 15:292 ^w -15:294N ^w , 15:306 ^w -15:307 ^w , 15:311 ^w -15:314 ^w , 15:323 ^w , 15:329 ^w , 15:335 ^w , 15:337 ^w - 15:338 ^w , 15:351 ^w , 15:354 ^w , 15:369 ^w , 15:376 ^w , 15:379 ^w -15:380N ^w , 15:388 ^w -15:389 ^w , 15:397 ^w , 15:414 ^w , 15:426 ^w -15:427 ^w , 15:429, 15:433 ^w - 15:436 ^w , 15:439 ^w , 15:444 ^w -15:445 ^w , 15:448 ^w , 15:451 ^w , 15:455 ^w , 15:475 ^w , 15:487N ^w , 15:498 ^w , 15:502 ^w - 15:503 ^w , 15:506 ^w , 15:509 ^w , 15:517 ^w , 15:526 ^w -15:527 ^w , 15:530 ^w , 15:545 ^w , 15:548 ^w , 15:560 ^w , 15:563 ^w , 15:573 ^w , 15:588 ^w , 18:25 ^w , 18:68 ^w , 35:25 ^w , 35:124 ^w -35:125 ^w , 35:142 ^w , 35:320 ^w ,



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

				35:487 ^w , 37:55 ^w , 38:33 ^w , 39:04 ^w , 40:12:01 ^w -40:12:02 ^w , 41:22 ^w , 44:156, 44:221 ^w , 44:258 ^w , 48:22 ^w , 49:25, 51:176, 51:179 ^w , 52:16 ^w , 52:27 ^w , 52:77, 53:43:01 ^w -53:43:02 ^w , 54:21 ^w , 56:16 ^w , 57:58 ^w , 57:80 ^w , 58:12 ^w , 83:01 ^w , C*06:125 , C*07:441:01-07:441:02
16⁴	105 bp	800 bp	*08:13, 08:25, 08:55, 08:143, 08:171, 08:205	*15:516, 27:83, 42:19, 53:15
17⁴	95 bp	1070 bp	*08:14, 08:87	*07:28, 07:118, 27:32, 40:180, 40:414, 44:54, 44:106, 44:135
18	425 bp	800 bp	*08:15	*07:13, 07:15, 07:92, 07:253 ^w , 07:304, 14:63, 14:97, 39:27, 39:143, 39:164, 39:166, 39:170, 40:73, 67:02:01:01-67:02:01:02, 73:01:01:01-73:03, C*16:112
	470 bp		*08:39	*07:93, 38:27
19	245 bp 415 bp	1070 bp	*08:44 *08:16, 08:123, 08:145	*07:13, 07:15, 07:160, 42:18, 67:02:01:01-67:02:01:02
20	140 bp 205 bp	1070 bp	*08:22 *08:17, 08:38:01- 08:38:02, 08:54:01- 08:54:02, 08:148N	*13:93, 15:142, 15:429, 37:62, 40:328, 44:49, 44:156, 49:25, 52:77, C*07:937
21	465 bp	1070 bp	*08:18	*07:102, 38:79, 73:01:01:01-73:03
22	130 bp 215 bp	800 bp	*08:19N *08:109	
23^{4,6}	85 bp	800 bp	*08:21, 08:25	*15:516, 15:576, 41:17, 44:342, 53:15
	235 bp		*08:17, 08:47	*13:39, 13:67, 15:57, 15:135, 15:530, 35:27, 35:56, 35:185, 35:203, 35:355, 44:75, 44:254, 55:12, 56:41, 78:06, 78:09-78:10, C*05:30, C*06:125, C*16:144
24⁴	85 bp 210 bp	1070 bp	*08:101 *08:26:01-08:26:03, 08:50, 08:94, 08:128, 08:239, 08:263, 08:272	*35:501, 51:39, C*06:147 *07:08:01-07:08:02, 07:32, 07:38, 07:207, 07:228:01-07:228:02, 14:42, 15:08:01-15:08:02, 15:29:01:01- 15:29:01:02, 15:56, 15:191, 15:236, 15:479, 15:508, 15:553, 35:01:01:01-35:19, 35:21-35:25, 35:27, 35:29:01-35:43:01, 35:43:03- 35:49:02, 35:51:01-35:62, 35:64:01- 35:71, 35:74-35:75, 35:77, 35:79- 35:81, 35:83, 35:86-35:94, 35:96- 35:134N, 35:136-35:161, 35:163- 35:185, 35:187-35:216N, 35:219- 35:225, 35:227-35:228, 35:230, 35:232-35:254, 35:257-35:279, 35:281-35:289, 35:291-35:293, 35:295, 35:297-35:316, 35:318- 35:322, 35:324-35:360,



0197

For In Vitro Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

				35:362-35:367, 35:369-35:438, 35:440, 35:442-35:462, 35:464- 35:518, 38:06-38:07, 38:74, 38:166, 39:58, 39:83:01-39:83:03, 39:170, 44:06, 44:232, 48:06, 48:31, 51:01:01:01-51:06:04, 51:08:01:01- 51:21, 51:23-51:24:05, 51:26-51:46, 51:48-51:67, 51:69-51:102, 51:104:01-51:115, 51:117-51:127, 51:129-51:144, 51:146-51:150, 51:152-51:166, 51:168-51:175, 51:177-51:188, 51:190-51:213, 51:215-51:221, 51:223-51:235N, 51:237:01-51:250, 51:252-51:271, 51:273N-51:292, 51:294-51:309, 51:311-51:339, 52:06:01-52:06:03, 53:01:01:01-53:08:02, 53:10-53:16, 53:18-53:27, 53:29-53:37, 53:39, 53:41-53:63, 59:01:01:01-59:07, 59:09-59:12, 78:01:01:02-78:02:02, 78:04, 78:07-78:10
25	180 bp 225 bp 250 bp	1070 bp	*08:49, 08:71 *08:28, 08:35, 08:37, 08:89, 08:107 *08:150	*15:516, 15:576, 27:83, 41:24, 42:10, 42:17, 44:342, 53:15 *15:576, 41:24, 41:30, 41:51, 42:09, 53:15
26	210 bp	1070 bp	*08:131, 08:136, 08:139	A*01:199, A*02:42:01-02:42:02, A*02:310, A*11:133, A*31:190, A*33:60, A*68:234
27⁴	105 bp 140 bp 215 bp	1070 bp	*08:30N *08:22 *08:29	*07:195, 18:147, 40:281
28⁴	85 bp 210 bp	1070 bp	*08:31 *08:66	
29⁴	110 bp 150 bp 190 bp 250 bp	1070 bp	*08:88, 08:102 *08:32, 08:133, 08:180 *08:137 *08:36	*40:328, 44:49, 49:25 *35:218, 35:256, 37:62, 51:68, 51:176, 52:77, C*07:209 C*07:377
30	250 bp	1070 bp	*08:82N, 08:86N, 08:135	*35:89
31	380 bp	1070 bp	*08:34	
32	230 bp	1070 bp	*08:01:01:01-08:05, 08:08N-08:13, 08:15- 08:27, 08:29-08:30N, 08:32-08:36, 08:38:01- 08:48, 08:50-08:73, 08:75-08:78, 08:80- 08:86N, 08:88, 08:90- 08:102, 08:104-08:106, 08:108-08:110, 08:112, 08:114-08:115, 08:117- 08:133, 08:135-08:155,	*35:87, 40:398, 41:01:01:01- 41:03:02, 41:05, 41:07, 41:11-41:14, 41:16-41:17, 41:19-41:20, 41:22- 41:28, 41:30-41:31, 41:33-41:48, 41:49 ^w , 41:50, 41:53-41:61, 41:64- 41:69, 42:01:01:01-42:02:02, 42:04, 42:06-42:07, 42:10-42:13, 42:15, 42:17-42:19, 42:21-42:29, 44:166, 55:20



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

			08:157-08:174, 08:176-08:186, 08:188-08:199, 08:201-08:226, 08:228-08:250, 08:251 ^w , 08:252N-08:254, 08:256-08:263, 08:265-08:272	
33	220 bp	800 bp	*08:55	*38:19, 39:03:01:01-39:03:01:03, 39:14:01:01-39:14:01:03, 39:24:01-39:24:02, 39:29, 39:37:01:01-39:37:01:02, 39:76, 39:120, 39:144, 39:152
	255 bp		*08:135	*35:89
	285 bp		*08:42	
34	210 bp	1070 bp	*08:45	
	305 bp		*08:59:01-08:59:02	*40:228 [?]
35⁴	120 bp	1070 bp	*08:51	
	205 bp		*08:57	
	235 bp		*08:113	
36⁴	125 bp	800 bp	*08:20:01-08:20:02, 08:53:01-08:53:02, 08:84	*07:388, 15:516, 15:576, 42:19
	270 bp		*08:33, 08:100	
37⁴	85 bp	1070 bp	*08:40, 08:165, 08:171, 08:205	*07:388, 27:83, 41:19
	155 bp		*08:41	*35:192, 35:240, 51:141, 51:277
	190 bp		*08:105	
	270 bp		*08:48	
38	175 bp	1070 bp	*08:61	
	190 bp		*08:105	
	265 bp		*08:58	
39⁷	190 bp	1070 bp	*08:46, 08:137	C*06:195, C*07:506
	225 bp		*08:132	*07:29, 07:186, 07:383, C*02:14:01-02:14:02, C*02:107, C*02:164, C*03:39, C*03:67, C*03:344:01:01-03:344:01:02, C*05:43, C*06:05, C*06:44, C*06:124, C*06:138, C*06:198, C*06:217, C*06:248, C*07:39-07:40, C*07:177, C*07:210, C*07:238, C*07:328, C*07:335, C*07:563, C*08:37, C*15:23:01-15:23:02, C*15:63, C*15:138, C*15:158, C*16:21, C*16:80
40	255 bp	1070 bp	*08:26:01-08:26:03, 08:56:01-08:56:03, 08:75, 08:180, 08:239	*07:56:01-07:56:02, 07:72, 07:206, 14:54, 35:516, 38:28, 39:63, 39:135, 40:21 [?] , 40:58 [?] , 40:137 [?] , 40:248 [?] , 40:282 [?] , 40:325 [?] , 40:351 [?] , 40:364 [?] , 41:12, 41:36, 42:21, 42:27, 49:03, 49:48, 52:90, 56:68, 58:108, C*16:112
41	180 bp	1070 bp	*08:108	
	210 bp		*08:62, 08:94, 08:242	



0197

For In Vitro Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

			*07:08:01-07:08:02, 07:32, 07:38, 07:207, 07:228:01-07:228:02, 18:07:01-18:07:03, 18:29, 18:79, 18:136, 27:23, 35:50, 35:84, 35:162, 35:197, 35:217, 35:231, 35:267, 35:280, 35:323, 35:423, 35:441, 35:494, 37:21, 37:67, 38:06-38:07, 38:74, 38:166, 39:58, 39:83:01-39:83:03, 39:170, 40:07-40:08, 40:13, 40:68, 40:106, 40:162, 40:220, 40:232, 41:46, 42:26, 48:06, 48:31, 49:67, 51:57, 51:103, 51:116, 51:151, 51:218, 53:21	
42	255 bp	1070 bp	*08:63, 08:100, 08:150	
43⁷	185 bp 215 bp	800 bp	*08:64 *08:70	*07:113 *07:55, 07:100, 15:07:01:01-15:07:03, 15:45, 15:68, 15:126, 15:207, 15:324, 15:331, 15:405, 15:431, 15:450, 15:524, 46:12, 48:19, C*02:60, C*06:264
44⁵	170 bp 215 bp	1070 bp	*08:67:01N-08:67:01N, 08:97 *08:65, 08:228	*27:225N, C*07:01:06 *14:28, 38:84, 39:12:01:01-39:12:01:02
45⁴	120 bp 225 bp	1070 bp	*08:68 *08:49, 08:69, 08:200	*41:50, 42:06, 42:20
46	175 bp 295 bp	1070 bp	*08:140 *08:104	
47⁸	240 bp	1070 bp	*08:03, 08:72N, 08:86N	*49:25, 51:68, 51:176, 52:77, 57:49
48⁹	-	-	Negative Control	

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 HLA-B*08 SSP typings.

When the primers in a primer mix can give rise to HLA-specific PCR products of more than one length this is indicated if the size difference is more than 20 base pairs. Size differences of 20 base pairs or less are not given. For high resolution SSP kits, the alleles listed are specified according to amplicon length.

Nonspecific amplifications, i.e. a ladder or a smear of bands, may sometimes be seen. GC-rich primers have a higher tendency of giving rise to nonspecific amplifications than other primers.

PCR fragments longer than the control bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.

PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings. 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 internal positive control bands are 1070 or 800 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the shorter, 800 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

³For several HLA Class I alleles 1st and/or 4th exon(s) and beyond, as well as intron nucleotide sequences, are not available. In these instances it is not known whether some of the primers of the SSP sets are completely



0197

For In Vitro Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: 3N4

Lot-specific information

matched with the target sequences or not. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

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

⁵Primer mixes 7 and 44 may have a tendency of giving rise to primer oligomer formation.

⁶Primer mixes 8 and 23 may give rise to a lower yield of HLA-specific PCR product than the other B*08 primer mixes.

⁷Primer mixes 39 and 43 may have tendencies of unspecific amplifications.

⁸Primer mix 47 may give rise to a lower yield of HLA-specific PCR product than the other HLA-B*08 primer mixes in the B*08:03 alleles.

⁹Primer mix 48 contains a negative control, which will amplify a majority of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR products generated by the HGH positive control primer pair is 200 base pairs.

Abbreviations

'w', might be weakly amplified.

'?', nucleotide sequence information not available for the primer matching sequence.



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

Visit <https://labproducts.caredx.com> for
“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec.	215	215	245	245	205	110	215	170	115	85	290	385
PCR product					245	170	250		165	170		
						205						
Length of int.	800	800	1070	1070	1070	1070	1070	1070	1070	800	800	1070
pos. control ¹												
5'-primer(s) ²	363	97	97	97	97	97	97	412	412	475	355	44
	5'-AgC 3'	5'-TCg 3'	5'-TCg 3'	5'-TCg 3'	5'-TCg 3'	5'-TCg 3'	5'-TCg 3'	5'-ATA 3'	5'-ATg 3'	5'-Cg 3'	5'-TCC 3'	5'-ggC 3'
				412					463	560	357	
				5'-ATA 3'					5'-TgA 3'	5'-CgA 3'	5'-Tgg 3'	
3'-primer(s) ³	538	272	299	309	259	167	269	539	538	603	603	259
	5'-gTC 3'	5'-TgA 3'	5'-TCT 3'	5'-gTg 3'	5'-gTT 3'	5'-ACA 3'	5'-Agg 3'	5'-TCC 3'	5'-gTC 3'	5'-gTg 3'	5'-gTg 3'	5'-gTC 3'
			299	604	292	226	302	539				
			5'-TCT 3'	5'-CgC 3'	5'-gTA 3'	5'-TAC 3'	5'-ggT 3'	5'-TCC 3'				
					309	251	307					
					5'-ATC 3'	5'-CCg 3'	5'-CCA 3'					
						272						
						5'-Tgg 3'						
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec.	85	115	75	105	95	425	245	140	465	130	85	85
PCR product	290	280				470	415	205		215	235	210
Length of int.	1070	1070	1070	800	1070	800	1070	1070	1070	800	800	1070
pos. control ¹												
5'-primer(s) ²	355	363	106	539	363	44	44	97	44	636	106	97
	5'-TCA 3'	5'-Agg 3'	5'-CCA 3'	5'-gCT 3'	5'-AgC 3'	5'-ggC 3'	5'-ggC 3'	5'-TCg 3'	5'-ggC 3'	5'-CAC 3'	5'-CCA 3'	5'-TCT 3'
	560	363						363			560	107
	5'-CgC 3'	5'-Agg 3'						5'-AgC 3'			5'-CCT 3'	5'-CAC 3'
		530										228
		5'-ggT 3'										5'-gTg 3'
3'-primer(s) ³	603	603	142	603	418	299	119	259	341	724	302	272
	5'-gTg 3'	5'-gTg 3'	5'-TgA 3'	5'-gTg 3'	5'-gTC 3'	5'-TCA 3'	5'-ggg 3'	5'-gTT 3'	5'-CgT 3'	5'-CTA 3'	5'-ggT 3'	5'-TgA 3'
			142			343	289	261		809	302	
			5'-TgA 3'			5'-T 3'	5'-AgC 3'	5'-gTC 3'		5'-CAA 3'	5'-ggT 3'	
							289	461			603	
							5'-AgC 3'	5'-gCg 3'			5'-gTg 3'	
Well No.	13	14	15	16	17	18	19	20	21	22	23	24



0197

For In Vitro Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec.	180	210	105	85	110	250	380	230	220	210	120	125
PCR product	225		140	210	150				255	305	205	270
	250		215		190				285		235	
					250							
Length of int.	1070	1070	1070	1070	1070	1070	1070	1070	800	1070	1070	800
pos. control ¹												
5'-primer(s) ²	395	142	317	103	97	363	319	412	363	44	108	364
	5'-gCC 3'	5'-TCT 3'	5'-gCA 3'	5'-CCA 3'	5'-TCg 3'	5'-AgC 3'	5'-gCT 3'	5'-ATA 3'	5'-AgC 3'	5'-ggC 3'	5'-ATC 3'	5'-gCT 3'
	419		363	610				412			194	385
	5'-gTC 3'		5'-AgC 3'	5'-TgA 3'				5'-ATA 3'			5'-Cgg 3'	5'-ggT 3'
	463										412	511
	5'-TgA 3'										5'-ATA 3'	5'-AgC 3'
												527
												5'-TgA 3'
3'-primer(s) ³	603	311	2 nd I	272	167	573	412	603	544	85	272	603
	5'-gTg 3'	5'-ggg 3'	5'-TCg 3'	5'-TgA 3'	5'-ACA 3'	5'-AgT 3'	5'-gTT 3'	5'-gTg 3'	5'-ggT 3'	5'-CAA 3'	5'-TgA 3'	5'-gTg 3'
			426	3 rd I	206	577		603	577	178	604	
			5'-TCT 3'	5'-TAT 3'	5'-CCg 3'	5'-gCA 3'		5'-gTg 3'	5'-gCA 3'	5'-gAg 3'	5'-CgC 3'	
			461		247	589			608	180		
			5'-gCg 3'		5'-ATg 3'	5'-CTA 3'			5'-CCT 3'	5'-TCC 3'		
					307							
					5'-CCA 3'							
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47
Length of spec.	85	175	190	255	180	255	185	170	120	175	240
PCR product	155	190	225		210		215	215	225	295	
	190	265									
	270										
Length of int.	1070	1070	1070	1070	1070	1070	800	1070	1070	1070	1070
pos. control ¹											
5'-primer(s) ²	160	139	97	44	97	385	363	97	419	350	97
	5'-ACT 3'	5'-TCg 3'	5'-TCg 3'	5'-ggC 3'	5'-TCC 3'	5'-ggT 3'	5'-AgC 3'	5'-TCg 3'	5'-gTT 3'	5'-TCC 3'	5'-TCg 3'
	376	379			106	388		97	419	467	363
	5'-gCA 3'	5'-ACA 3'			5'-CCg 3'	5'-CgA 3'		5'-TCC 3'	5'-gTT 3'	5'-CTA 3'	5'-AgC 3'
	454	454			397	395			523		
	5'-ACC 3'	5'-ACC 3'			5'-gCT 3'	5'-gCC 3'			5'-CCT 3'		
	560										
	5'-CgA 3'										
3'-primer(s) ³	272	272	245	119	272	603	506	224	603	603	292
	5'-TgA 3'	5'-TgA 3'	5'-ACC 3'	5'-ggA 3'	5'-TgA 3'	5'-gTg 3'	5'-Tgg 3'	5'-TCT 3'	5'-gTg 3'	5'-gTg 3'	5'-gTA 3'
	603	603	247	142	538		538	225			295
	5'-gTg 3'	5'-gTg 3'	5'-ATg 3'	5'-TgC 3'	5'-gTC 3'		5'-CCA 3'	5'-ATT 3'			5'-TCA 3'
			280					226			573
			5'-CTg 3'					5'-TAC 3'			5'-AgT 3'
								272			
								5'-TgC 3'			
Well No.	37	38	39	40	41	42	43	44	45	46	47

¹The internal positive control primer pairs amplify segments of the human growth hormone gene.

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

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

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



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: 3N4

Lot-specific information

CELL LINE VALIDATION SHEET																					
HLA-B*08 SSP subtyping kit ²																					
					Well																
					Prod. No.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					Prod. No.:	201893001	201893002	201893003	201893004	201893005	202132806	201893007	201893008	201893009	201893010	201893011	201893012	201893013	201893014	201901415	201893016
	IHWC cell line ¹		B*																		
1	9001	SA	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*52:01	*73:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*52:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*15:10	*53:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*37:01			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
6	9353	SM	*39:01	*51:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*35:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*54:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*44:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*57:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*27:05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*15:01	*15:20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*40:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*08:01	*55:01		+	+	+	-	-	-	-	-	-	-	-	-	-	-	+	-
18	9257	32367	*14:01	*56:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*35:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*40:02	*56:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*14:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*58:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*07:05	*51:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*44:02	*44:03		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
29	9050	MOU	*44:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*42:01			+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*41:02			+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*44:02			-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
36	9024	KT17	*15:01	*35:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*08:01	*27:05		+	+	+	-	-	-	-	-	-	-	-	-	-	-	+	-
40	9134	WHONP199	*13:02	*46:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*14:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*42:01	*50:01		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*51:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*35:01	*44:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
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Lot No.: 3N4

Lot-specific information

CELL LINE VALIDATION SHEET																															
HLA-B*08 SSP subtyping kit ²																															
						Well																									
						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32										
					Prod. No.:	201893017	201893018	201893019	201893020	201893021	201893022	201893023	201893024	201893025	201893026	201893027	201893028	201893029	201893030	201893031	201893032										
	IHCW cell line ¹		B*																												
1	9001	SA	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
2	9280	LK707	*52:01	*73:01		-	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-									
3	9011	E4181324	*52:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
4	9275	GU373	*15:10	*53:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
5	9009	KAS011	*37:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
6	9353	SM	*39:01	*51:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
7	9020	QBL	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
8	9007	DEM	*35:01			-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
9	9026	YAR	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
10	9107	LKT3	*54:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
11	9051	PITOUT	*44:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
12	9052	DBB	*57:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
13	9004	JESTHOM	*27:05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
14	9071	OLGA	*15:01	*15:20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
15	9075	DKB	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
16	9037	SWEIG007	*40:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
17	9282	CTM3953540	*08:01	*55:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+									
18	9257	32367	*14:01	*56:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
19	9038	BM16	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
20	9059	SLE005	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
21	9064	AMALA	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
22	9056	KOSE	*35:03			-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
23	9124	IHL	*40:02	*56:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
24	9035	JBUSH	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
25	9049	IBW9	*14:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
26	9285	WT49	*58:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
27	9191	CH1007	*07:05	*51:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
28	9320	BEL5GB	*44:02	*44:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
29	9050	MOU	*44:03			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
30	9021	RSH	*42:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+									
31	9019	DUCAF	*18:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
32	9297	HAG	*41:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+									
33	9098	MT14B	*40:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
34	9104	DHIF	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
35	9302	SSTO	*44:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
36	9024	KT17	*15:01	*35:01		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
37	9065	HHKB	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
38	9099	LZL	*15:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
39	9315	CML	*08:01	*27:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+									
40	9134	WHONP199	*13:02	*46:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
41	9055	H0301	*14:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
42	9066	TAB089	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
43	9076	T7526	*46:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
44	9057	TEM	*38:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
45	9239	SHJO	*42:01	*50:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+									
46	9013	SCHU	*07:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
47	9045	TUBO	*51:01			-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									
48	9303	TER-ND	*35:01	*44:03		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-									



0197

For *In Vitro* Diagnostic Use
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Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
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Lot No.: 3N4

Lot-specific information

[illegible]

0197

For *In Vitro* Diagnostic Use
MA123 v01 SSP PI Template
Date: August 2021, Rev. No: 00

101.513-24/04 – including *Taq* pol., IFU-01
101.513-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **3N4**

Lot-specific information

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

²The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 5 to 7, 10, 12 to 14, 16, 17, 19, 20, 25 to 31, 33 to 40, 42 and 44 to 47 were available.

The specificities of the primers in primer solutions 5 to 7, 10, 13, 14, 16, 17, 19, 20, 25 to 27, 29, 33, 35 to 37, 39, 40, 44, 45 and 47 were tested by separately adding one or two additional 5'-primers, respectively one or two additional 3'-primers. In primer solutions 12, 30 and 34 it was only possible to test the 5'-primer, the 3'-primers were not possible to test.

In primer solutions 28, 31, 38, 42 and 46 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 4 to 7, 15, 19, 20, 22, 27, 29, 33, 35, 39, 40, 43, 44 and 47 one or two of the 3'-primers were not possible to test, and in primer solutions 10, 13, 14, 24, 25, 27, 35 to 37 and 45 one, two or three of the 5'-primers were not possible to test.

In addition, one or more 3'-and/or 5'-primers in primer solutions 4, 9, 11, 18, 23, 24 and 41 were tested by separately adding either one 3'-primer or one 5'-primer.



0197

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“Instructions for Use” (IFU)

Lot No.: **3N4**

Lot-specific information

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Tel: +46-8-508 939 00

Fax: +46-8-717 88 18

E-mail: orders-se@caredx.com

Web page: <https://labproducts.caredx.com/>

CareDx Lab Solutions Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

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Web page: <https://labproducts.caredx.com/>

For information on CareDx distributors worldwide, contact **CareDx AB**.



0197

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