

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Olerup SSP® HLA-A*02

Product number:	101.412-24/04 – including <i>Taq</i> pol. 101.412-24u/04u – without <i>Taq</i> pol.
Lot number:	2L5
Expiry date:	2024-06-01
Number of tests:	24 tests – Product No. 101.412-24/24u 4 tests – Product No. 101.412-04/04u
Number of wells per test:	95+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. 2L5.

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-A*02 Lot (8H9)

- The product documentation has been updated for new alleles of IMGT 3.39.0.
- The kit resolution focuses on common and well documented (CWD) alleles¹.

¹As described in section Uniquely Identified Alleles.

The HLA-A*02 primer set, specificity and interpretation tables have been updated for the HLA-A alleles described since the previous *Olerup SSP®* HLA-A lot was made (**Lot No. 8H9**).

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



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

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

Well	5'-primer	3'-primer	rationale
15	-	Added	3'-primer added from primer mix 88.
24	-	Added	3'-primer added from primer mix 79.
49	-	Added	3'-primer added from primer mix 79.
75	-	Added	3'-primer added from primer mix 79.
79	Removed	Removed	5'-primer removed, and 3'-primers moved to primer mixes 24, 49 and 75 for reducing tendency of primer oligomer formation.
88	-	Removed	3'-primer moved to primer mix 15 for reducing tendency of primer oligomer formation and improving HLA-specific amplification.

Changes in revision R01 compared to R00:

1. Primer mix 15 weakly amplifies the A*02:34 allele. This has been corrected in the Product Insert and the Worksheet.

Changes in Revision R02 compared to R01:

1. Primer mix 2 amplifies the A*02:76:01-02:76:02, 02:319 and 02:666 and the A*24:28, 24:89, 24:379, 30:13, 30:16, 30:44 and 30:46 alleles. This correction has been implemented in the specificity and interpretation tables.



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Well 96 contains Negative Control primer pairs, that will amplify the 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 product 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'-CAC ^{3'}	5'-Agg ^{3'}	5'-TTA ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-TAC ^{3'}
							36
							5'-TAT ^{3'}
3'-primer²	231	2nd I	507	59	58	57	47
	5'-TgC ^{3'}	5'-AAA ^{3'}	5'-TTg ^{3'}	5'-CTC ^{3'}	5'-ggC ^{3'}	5'-CTC ^{3'}	5'-ACA ^{3'}
							48
							5'-gCA ^{3'}
							48
							5'-gCC ^{3'}
							52
							5'-TgT ^{3'}
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

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

PRODUCT DESCRIPTION

HLA-A*02 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the A*02:01 to A*02:914 alleles.

PLATE LAYOUT

Each test consists of 96 PCR reactions in a 96 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	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	NC

The 96 well cut PCR plate is marked with ‘HLA-A*02’ in silver/gray ink.

Well No. 1 is marked with the Lot No. ‘2L5’.

Wells 1 to 95 – HLA-A*02 high resolution primers.

Well 96 – 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.

INTERPRETATION

Due to the sharing of sequence motifs between HLA-A alleles non-HLA-A*02 alleles will be amplified by some primer mixes. For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All HLA-A*02 alleles recognized by the HLA Nomenclature Committee in January 2020, i.e. **A*02:01 to A*02:914**, will be amplified by the primers in the HLA-A*02 subtyping kit^{1,2}.

The HLA-A*02 kit enables separation of the confirmed HLA-A*02 alleles as listed in the IMGT/HLA database 3.25.0. 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-A*02 alleles is listed below.



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

The HLA-A*02 kit also enables identification of many null and alternatively expressed alleles.

The following HLA-A*02 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
A*02:01:83, 02:01:105, 02:01:107, 02:01:129, 02:01:138, 02:343, 02:399, 02:668, 02:699, 02:879N	55	A*02:134, 02:314N	85
A*02:18, 02:912	39	A*02:138, 02:284N	87
A*02:28, 02:409	27	A*02:140, 02:468:02N, 02:836	89
A*02:60:01-02:60:02, 02:254, 02:501N	45	A*02:141, 02:275	90
A*02:70, 02:820	32	A*02:145, 02:221	64
A*02:96, 02:139, 02:587	15	A*02:150:01, 02:197:01-02:197:02, 02:325, 02:745	94
A*02:97:01-02:97:02, 02:305N	59	A*02:159, 02:293Q, 02:364, 02:390	39
A*02:107, 02:202, 02:251	65	A*02:180, 02:358	29
A*02:111, 02:350N, 02:679	67	A*02:193, 02:213	78
A*02:119, 02:263, 02:553	73	A*02:233:01, 02:459	24
A*02:120, 02:223N	74	A*02:269, 02:367	70
A*02:132, 02:215, 02:237, 02:467	83	A*02:301N, 02:524:01-02:524:02	63

¹HLA-A alleles listed on the IMGT/HLA web page 2020-January-20, release 3.39.0, 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>.



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: 2L5

Lot-specific information

ALLELE CONFIRMATION STATUS

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



0197

For In Vitro Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*02:22:01	Confirmed	A*02:64:02	Unconfirmed	A*02:111	Unconfirmed	A*02:158	Confirmed
A*02:22:02	Unconfirmed	A*02:65	Unconfirmed	A*02:112	Unconfirmed	A*02:159	Unconfirmed
A*02:24:01	Confirmed	A*02:66	Confirmed	A*02:113:01N	Confirmed	A*02:160	Confirmed
A*02:24:02	Unconfirmed	A*02:67	Unconfirmed	A*02:113:02N	Unconfirmed	A*02:161	Confirmed
A*02:25	Confirmed	A*02:68	Unconfirmed	A*02:114	Confirmed	A*02:162	Unconfirmed
A*02:26	Unconfirmed	A*02:69	Unconfirmed	A*02:115	Unconfirmed	A*02:163	Confirmed
A*02:27	Confirmed	A*02:70	Unconfirmed	A*02:116	Unconfirmed	A*02:164	Confirmed
A*02:28	Confirmed	A*02:71	Unconfirmed	A*02:117	Unconfirmed	A*02:165	Confirmed
A*02:29	Confirmed	A*02:72	Unconfirmed	A*02:118	Confirmed	A*02:166	Confirmed
A*02:30:01	Confirmed	A*02:73	Unconfirmed	A*02:119	Confirmed	A*02:167	Unconfirmed
A*02:30:02	Unconfirmed	A*02:74:01	Unconfirmed	A*02:120	Unconfirmed	A*02:168	Unconfirmed
A*02:31	Unconfirmed	A*02:74:02	Unconfirmed	A*02:121	Confirmed	A*02:169	Confirmed
A*02:32N	Unconfirmed	A*02:75	Unconfirmed	A*02:122	Confirmed	A*02:170	Unconfirmed
A*02:33	Confirmed	A*02:76:01	Confirmed	A*02:123	Confirmed	A*02:171:01	Unconfirmed
A*02:34	Unconfirmed	A*02:76:02	Unconfirmed	A*02:124	Unconfirmed	A*02:171:02	Unconfirmed
A*02:35:01	Confirmed	A*02:77	Confirmed	A*02:125N	Confirmed	A*02:172	Confirmed
A*02:35:02	Unconfirmed	A*02:78	Unconfirmed	A*02:126	Unconfirmed	A*02:173	Confirmed
A*02:35:03	Unconfirmed	A*02:79:01	Unconfirmed	A*02:127	Unconfirmed	A*02:174	Confirmed
A*02:36	Confirmed	A*02:79:02	Unconfirmed	A*02:128	Confirmed	A*02:175	Unconfirmed
A*02:37	Unconfirmed	A*02:80	Confirmed	A*02:129	Confirmed	A*02:176	Confirmed
A*02:38	Confirmed	A*02:81	Unconfirmed	A*02:130	Unconfirmed	A*02:177	Confirmed
A*02:39	Confirmed	A*02:82N	Confirmed	A*02:131	Confirmed	A*02:178	Unconfirmed
A*02:40:01	Confirmed	A*02:83N	Confirmed	A*02:132	Unconfirmed	A*02:179	Unconfirmed
A*02:40:02	Confirmed	A*02:84	Confirmed	A*02:133	Confirmed	A*02:180	Confirmed
A*02:41	Confirmed	A*02:85	Confirmed	A*02:134	Unconfirmed	A*02:181	Unconfirmed
A*02:42	Confirmed	A*02:86	Confirmed	A*02:135	Unconfirmed	A*02:182	Confirmed
A*02:43N	Unconfirmed	A*02:87	Confirmed	A*02:136	Confirmed	A*02:183	Confirmed
A*02:44	Confirmed	A*02:88N	Unconfirmed	A*02:137	Unconfirmed	A*02:184	Unconfirmed
A*02:45	Unconfirmed	A*02:89	Unconfirmed	A*02:138	Unconfirmed	A*02:185	Unconfirmed
A*02:46	Unconfirmed	A*02:90	Confirmed	A*02:139	Confirmed	A*02:186	Confirmed
A*02:47	Unconfirmed	A*02:91	Unconfirmed	A*02:140	Unconfirmed	A*02:187	Unconfirmed
A*02:48	Confirmed	A*02:92	Unconfirmed	A*02:141	Confirmed	A*02:188	Confirmed
A*02:49	Confirmed	A*02:93	Confirmed	A*02:142	Unconfirmed	A*02:189	Confirmed
A*02:50	Unconfirmed	A*02:94N	Unconfirmed	A*02:143	Unconfirmed	A*02:190	Confirmed
A*02:51	Confirmed	A*02:95	Confirmed	A*02:144	Unconfirmed	A*02:191	Unconfirmed
A*02:52	Unconfirmed	A*02:96	Confirmed	A*02:145	Unconfirmed	A*02:192	Unconfirmed
A*02:53N	Confirmed	A*02:97:01	Confirmed	A*02:146	Confirmed	A*02:193	Confirmed
A*02:54	Confirmed	A*02:97:02	Unconfirmed	A*02:147	Confirmed	A*02:194	Confirmed
A*02:55	Confirmed	A*02:99	Unconfirmed	A*02:148	Unconfirmed	A*02:195	Unconfirmed
A*02:56:01	Unconfirmed	A*02:101:01	Unconfirmed	A*02:149	Confirmed	A*02:196	Unconfirmed
A*02:56:02	Unconfirmed	A*02:101:02	Confirmed	A*02:150	Unconfirmed	A*02:197	Confirmed
A*02:57	Unconfirmed	A*02:102	Confirmed	A*02:151	Confirmed	A*02:198	Confirmed
A*02:58	Confirmed	A*02:103	Unconfirmed	A*02:152	Unconfirmed	A*02:199	Confirmed
A*02:59	Unconfirmed	A*02:104	Unconfirmed	A*02:153:01	Confirmed	A*02:200	Confirmed
A*02:60:01	Confirmed	A*02:105	Confirmed	A*02:153:02	Unconfirmed	A*02:201	Unconfirmed
A*02:60:02	Unconfirmed	A*02:106	Unconfirmed	A*02:154	Confirmed	A*02:202	Confirmed
A*02:61	Confirmed	A*02:107	Unconfirmed	A*02:155	Unconfirmed	A*02:203	Confirmed
A*02:62	Unconfirmed	A*02:108	Unconfirmed	A*02:156	Unconfirmed	A*02:204	Unconfirmed
A*02:63	Unconfirmed	A*02:109	Unconfirmed	A*02:157:01	Unconfirmed	A*02:205	Confirmed
A*02:64:01	Confirmed	A*02:110	Confirmed	A*02:157:02	Unconfirmed	A*02:206	Confirmed



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*02:207	Confirmed	A*02:254	Unconfirmed	A*02:303	Unconfirmed	A*02:353	Unconfirmed
A*02:208	Unconfirmed	A*02:255	Unconfirmed	A*02:304	Unconfirmed	A*02:354	Unconfirmed
A*02:209	Unconfirmed	A*02:256	Unconfirmed	A*02:305N	Unconfirmed	A*02:355	Unconfirmed
A*02:210	Unconfirmed	A*02:257	Unconfirmed	A*02:306	Unconfirmed	A*02:356N	Unconfirmed
A*02:211:01	Confirmed	A*02:258	Unconfirmed	A*02:307	Unconfirmed	A*02:357	Unconfirmed
A*02:211:02	Unconfirmed	A*02:259	Confirmed	A*02:308	Unconfirmed	A*02:358	Unconfirmed
A*02:212	Unconfirmed	A*02:260	Confirmed	A*02:309	Unconfirmed	A*02:359	Unconfirmed
A*02:213	Confirmed	A*02:261	Unconfirmed	A*02:310	Unconfirmed	A*02:360	Confirmed
A*02:214	Confirmed	A*02:262	Unconfirmed	A*02:311	Unconfirmed	A*02:361	Unconfirmed
A*02:215	Confirmed	A*02:263	Confirmed	A*02:312	Unconfirmed	A*02:362	Unconfirmed
A*02:216	Unconfirmed	A*02:264	Unconfirmed	A*02:313	Confirmed	A*02:363	Unconfirmed
A*02:217:01	Unconfirmed	A*02:265	Unconfirmed	A*02:314N	Unconfirmed	A*02:364	Unconfirmed
A*02:217:02	Unconfirmed	A*02:266	Unconfirmed	A*02:315	Confirmed	A*02:365	Unconfirmed
A*02:218	Unconfirmed	A*02:267	Confirmed	A*02:316	Unconfirmed	A*02:366N	Unconfirmed
A*02:219	Unconfirmed	A*02:268	Unconfirmed	A*02:317	Unconfirmed	A*02:367	Confirmed
A*02:220	Unconfirmed	A*02:269	Confirmed	A*02:318	Unconfirmed	A*02:368	Unconfirmed
A*02:221	Confirmed	A*02:270	Unconfirmed	A*02:319	Unconfirmed	A*02:369	Unconfirmed
A*02:222N	Unconfirmed	A*02:271	Unconfirmed	A*02:320	Unconfirmed	A*02:370	Unconfirmed
A*02:223N	Confirmed	A*02:272	Unconfirmed	A*02:321N	Unconfirmed	A*02:371	Unconfirmed
A*02:224	Unconfirmed	A*02:273	Unconfirmed	A*02:322	Unconfirmed	A*02:372	Unconfirmed
A*02:225N	Unconfirmed	A*02:274	Unconfirmed	A*02:323	Confirmed	A*02:373N	Unconfirmed
A*02:226N	Unconfirmed	A*02:275	Confirmed	A*02:324	Unconfirmed	A*02:374	Unconfirmed
A*02:227N	Confirmed	A*02:276	Unconfirmed	A*02:325	Confirmed	A*02:375	Unconfirmed
A*02:228	Confirmed	A*02:277	Unconfirmed	A*02:326	Unconfirmed	A*02:376	Unconfirmed
A*02:229	Confirmed	A*02:278	Unconfirmed	A*02:327	Unconfirmed	A*02:377	Confirmed
A*02:230	Confirmed	A*02:279	Unconfirmed	A*02:328	Unconfirmed	A*02:378	Unconfirmed
A*02:231	Unconfirmed	A*02:280	Unconfirmed	A*02:329	Unconfirmed	A*02:379	Unconfirmed
A*02:232	Unconfirmed	A*02:281	Unconfirmed	A*02:330	Confirmed	A*02:380	Confirmed
A*02:233	Confirmed	A*02:282	Unconfirmed	A*02:331	Unconfirmed	A*02:381	Unconfirmed
A*02:234	Unconfirmed	A*02:283	Confirmed	A*02:332	Unconfirmed	A*02:382	Unconfirmed
A*02:235	Confirmed	A*02:284N	Unconfirmed	A*02:333	Unconfirmed	A*02:383	Unconfirmed
A*02:236	Unconfirmed	A*02:285	Unconfirmed	A*02:334	Unconfirmed	A*02:384	Confirmed
A*02:237	Confirmed	A*02:286	Unconfirmed	A*02:335	Unconfirmed	A*02:385	Unconfirmed
A*02:238	Unconfirmed	A*02:287	Unconfirmed	A*02:336	Unconfirmed	A*02:386	Unconfirmed
A*02:239	Unconfirmed	A*02:288	Unconfirmed	A*02:337	Unconfirmed	A*02:387	Unconfirmed
A*02:240	Unconfirmed	A*02:289:01	Confirmed	A*02:338	Confirmed	A*02:388	Unconfirmed
A*02:241	Unconfirmed	A*02:289:02	Unconfirmed	A*02:339	Unconfirmed	A*02:389	Unconfirmed
A*02:242	Confirmed	A*02:290	Unconfirmed	A*02:340	Unconfirmed	A*02:390	Confirmed
A*02:243:01	Unconfirmed	A*02:291	Confirmed	A*02:341	Unconfirmed	A*02:391	Confirmed
A*02:243:02	Unconfirmed	A*02:292	Unconfirmed	A*02:342	Confirmed	A*02:392	Confirmed
A*02:244	Unconfirmed	A*02:293Q	Unconfirmed	A*02:343	Confirmed	A*02:393	Confirmed
A*02:245	Confirmed	A*02:294	Unconfirmed	A*02:344	Confirmed	A*02:394	Confirmed
A*02:246	Confirmed	A*02:295	Unconfirmed	A*02:345	Unconfirmed	A*02:395N	Unconfirmed
A*02:247	Unconfirmed	A*02:296	Unconfirmed	A*02:346	Unconfirmed	A*02:396	Unconfirmed
A*02:248	Unconfirmed	A*02:297	Unconfirmed	A*02:347	Unconfirmed	A*02:397	Unconfirmed
A*02:249	Unconfirmed	A*02:298	Unconfirmed	A*02:348	Confirmed	A*02:398	Unconfirmed
A*02:250N	Unconfirmed	A*02:299	Confirmed	A*02:349	Unconfirmed	A*02:399	Unconfirmed
A*02:251	Confirmed	A*02:300	Unconfirmed	A*02:350N	Confirmed	A*02:400	Unconfirmed
A*02:252	Unconfirmed	A*02:301N	Unconfirmed	A*02:351	Confirmed	A*02:401	Unconfirmed
A*02:253	Unconfirmed	A*02:302	Unconfirmed	A*02:352	Unconfirmed	A*02:402	Unconfirmed



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*02:403	Unconfirmed	A*02:453	Unconfirmed	A*02:502	Unconfirmed	A*02:551	Unconfirmed
A*02:404	Confirmed	A*02:454	Unconfirmed	A*02:503	Unconfirmed	A*02:552	Unconfirmed
A*02:405	Unconfirmed	A*02:455	Unconfirmed	A*02:504	Unconfirmed	A*02:553	Confirmed
A*02:406	Confirmed	A*02:456	Unconfirmed	A*02:505	Unconfirmed	A*02:554	Unconfirmed
A*02:407	Confirmed	A*02:457	Unconfirmed	A*02:506N	Unconfirmed	A*02:555	Unconfirmed
A*02:408	Unconfirmed	A*02:458	Unconfirmed	A*02:507	Unconfirmed	A*02:556	Unconfirmed
A*02:409	Confirmed	A*02:459	Unconfirmed	A*02:508	Unconfirmed	A*02:557	Unconfirmed
A*02:410	Unconfirmed	A*02:460	Confirmed	A*02:509	Unconfirmed	A*02:558	Unconfirmed
A*02:411	Unconfirmed	A*02:461	Unconfirmed	A*02:510	Unconfirmed	A*02:559	Unconfirmed
A*02:412	Unconfirmed	A*02:462	Unconfirmed	A*02:511	Unconfirmed	A*02:560	Unconfirmed
A*02:413	Unconfirmed	A*02:463	Unconfirmed	A*02:512	Unconfirmed	A*02:561	Unconfirmed
A*02:414	Unconfirmed	A*02:464	Unconfirmed	A*02:513	Unconfirmed	A*02:562	Unconfirmed
A*02:415	Unconfirmed	A*02:465	Unconfirmed	A*02:514N	Unconfirmed	A*02:563	Unconfirmed
A*02:416	Unconfirmed	A*02:466	Unconfirmed	A*02:515	Unconfirmed	A*02:564	Confirmed
A*02:417	Unconfirmed	A*02:467	Unconfirmed	A*02:516N	Unconfirmed	A*02:565	Unconfirmed
A*02:418	Unconfirmed	A*02:468:01N	Unconfirmed	A*02:517	Unconfirmed	A*02:566	Unconfirmed
A*02:419	Confirmed	A*02:468:02N	Unconfirmed	A*02:518	Unconfirmed	A*02:567	Unconfirmed
A*02:420	Unconfirmed	A*02:469	Unconfirmed	A*02:519	Unconfirmed	A*02:568	Unconfirmed
A*02:421	Unconfirmed	A*02:470	Unconfirmed	A*02:520	Unconfirmed	A*02:569	Unconfirmed
A*02:422	Unconfirmed	A*02:471	Unconfirmed	A*02:521	Unconfirmed	A*02:570	Unconfirmed
A*02:423	Unconfirmed	A*02:472	Unconfirmed	A*02:522	Unconfirmed	A*02:571	Unconfirmed
A*02:424	Unconfirmed	A*02:473	Unconfirmed	A*02:523	Unconfirmed	A*02:572	Unconfirmed
A*02:425	Unconfirmed	A*02:474	Unconfirmed	A*02:524:01	Unconfirmed	A*02:573	Unconfirmed
A*02:426	Confirmed	A*02:475	Unconfirmed	A*02:524:02	Unconfirmed	A*02:574	Unconfirmed
A*02:427	Unconfirmed	A*02:476N	Unconfirmed	A*02:525N	Unconfirmed	A*02:575	Unconfirmed
A*02:428	Unconfirmed	A*02:477	Unconfirmed	A*02:526	Unconfirmed	A*02:576	Unconfirmed
A*02:429	Confirmed	A*02:478	Unconfirmed	A*02:527	Unconfirmed	A*02:577	Unconfirmed
A*02:430	Unconfirmed	A*02:479	Unconfirmed	A*02:528	Confirmed	A*02:578	Unconfirmed
A*02:431	Unconfirmed	A*02:480	Unconfirmed	A*02:529	Unconfirmed	A*02:579	Unconfirmed
A*02:432	Unconfirmed	A*02:481	Confirmed	A*02:530	Unconfirmed	A*02:580	Confirmed
A*02:433	Confirmed	A*02:482	Unconfirmed	A*02:531	Unconfirmed	A*02:581	Unconfirmed
A*02:434	Confirmed	A*02:483	Unconfirmed	A*02:532	Unconfirmed	A*02:582	Unconfirmed
A*02:435	Unconfirmed	A*02:484	Unconfirmed	A*02:533	Unconfirmed	A*02:583	Unconfirmed
A*02:436	Confirmed	A*02:485	Unconfirmed	A*02:534	Unconfirmed	A*02:584	Unconfirmed
A*02:437	Confirmed	A*02:486	Confirmed	A*02:535	Unconfirmed	A*02:585	Unconfirmed
A*02:438	Unconfirmed	A*02:487	Unconfirmed	A*02:536	Unconfirmed	A*02:586	Unconfirmed
A*02:439N	Unconfirmed	A*02:488	Unconfirmed	A*02:537	Unconfirmed	A*02:587	Confirmed
A*02:440Q	Unconfirmed	A*02:489	Confirmed	A*02:538	Unconfirmed	A*02:588	Unconfirmed
A*02:441	Unconfirmed	A*02:490N	Unconfirmed	A*02:539	Unconfirmed	A*02:589	Unconfirmed
A*02:442	Unconfirmed	A*02:491	Unconfirmed	A*02:540N	Unconfirmed	A*02:590	Unconfirmed
A*02:443	Unconfirmed	A*02:492	Unconfirmed	A*02:541	Confirmed	A*02:591	Confirmed
A*02:444	Unconfirmed	A*02:493	Unconfirmed	A*02:542	Confirmed	A*02:592	Unconfirmed
A*02:445	Unconfirmed	A*02:494	Unconfirmed	A*02:543	Unconfirmed	A*02:593	Unconfirmed
A*02:446	Unconfirmed	A*02:495	Unconfirmed	A*02:544	Unconfirmed	A*02:594	Unconfirmed
A*02:447	Unconfirmed	A*02:496	Unconfirmed	A*02:545	Unconfirmed	A*02:595	Unconfirmed
A*02:448	Unconfirmed	A*02:497	Unconfirmed	A*02:546	Unconfirmed	A*02:596	Unconfirmed
A*02:449	Unconfirmed	A*02:498	Unconfirmed	A*02:547	Unconfirmed	A*02:597	Confirmed
A*02:450	Unconfirmed	A*02:499	Unconfirmed	A*02:548	Unconfirmed	A*02:598	Unconfirmed



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

A*02:451	Unconfirmed	A*02:500Q	Unconfirmed	A*02:549	Unconfirmed	A*02:599	Unconfirmed
A*02:452	Unconfirmed	A*02:501N	Unconfirmed	A*02:550	Unconfirmed	A*02:600	Unconfirmed

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
A*02:601	Unconfirmed	A*02:611	Unconfirmed	A*02:621	Unconfirmed	A*02:631	Unconfirmed
A*02:602	Unconfirmed	A*02:612	Unconfirmed	A*02:622N	Unconfirmed	A*02:632	Unconfirmed
A*02:603	Unconfirmed	A*02:613	Unconfirmed	A*02:623	Unconfirmed	A*02:633	Unconfirmed
A*02:604	Unconfirmed	A*02:614	Unconfirmed	A*02:624	Unconfirmed	A*02:634	Unconfirmed
A*02:605Q	Unconfirmed	A*02:615	Unconfirmed	A*02:625	Unconfirmed		
A*02:606	Unconfirmed	A*02:616	Unconfirmed	A*02:626	Unconfirmed		
A*02:607	Unconfirmed	A*02:617	Unconfirmed	A*02:627	Unconfirmed		
A*02:608N	Unconfirmed	A*02:618Q	Unconfirmed	A*02:628	Unconfirmed		
A*02:609	Unconfirmed	A*02:619	Unconfirmed	A*02:629	Unconfirmed		
A*02:610	Unconfirmed	A*02:620	Unconfirmed	A*02:630	Unconfirmed		

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2016-July-14, release 3.25.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in HLA-A*02 homo- and heterozygotes is available upon request.



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information
SPECIFICITY TABLE

HLA-A*02 SSP subtyping

Specificities and sizes of the PCR products of the 95+1 primer mixes used for
HLA-A*02 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-A*02 alleles ³	Other amplified HLA-A alleles
1 ¹⁰	360 bp	800 bp	*02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:81, 02:01:83-02:01:86, 02:01:88 ^w , 02:01:89-02:01:90, 02:01:92-02:01:117, 02:01:119-02:06:28, 02:08-02:09:01:02, 02:12-02:14, 02:16, 02:19-02:22:02, 02:24:01-02:32N, 02:34, 02:36-02:38, 02:40:01-02:46, 02:49:01-02:68, 02:70-02:77, 02:79:01-02:80, 02:82N-02:86:02, 02:88N-02:89:02, 02:91-02:97:02, 02:99:01-02:99:02, 02:101:01-02:102, 02:104-02:107, 02:109, 02:111, 02:113:01N-02:123, 02:125N-02:127, 02:131:01:01-02:135, 02:137-02:145, 02:147, 02:149-02:190, 02:192-02:211:01, 02:212-02:218, 02:220-02:241, 02:243:01-02:243:03, 02:245-02:246, 02:248-02:249, 02:251-02:254, 02:256-02:260, 02:262-02:264:01:02, 02:266-02:267, 02:269-02:281, 02:283-02:296, 02:299, 02:301N-02:302, 02:304-02:307, 02:309-02:316, 02:318, 02:320-02:330, 02:332-02:334, 02:336-02:346, 02:348-02:350N, 02:352-02:360, 02:362-02:368, 02:370-02:397, 02:399-02:402, 02:404-02:407, 02:409-02:417, 02:418 ^w , 02:419:01-02:421, 02:423-02:425, 02:427-02:428, 02:430-02:431, 02:433-02:436, 02:438-02:448, 02:454-02:456, 02:458-02:459, 02:461-02:473, 02:475-02:476N, 02:480-02:489, 02:491-02:493, 02:495-02:502, 02:504-02:512, 02:515, 02:516N ^w , 02:517-02:539, 02:542-02:543, 02:545, 02:547-02:553, 02:555-02:565, 02:568-02:570:02, 02:572-02:574, 02:576-02:578, 02:581Q-02:582, 02:585, 02:587-02:588, 02:590-02:593, 02:596-02:603, 02:605Q ^w , 02:606-02:616, 02:618Q-02:621, 02:623-02:627, 02:629, 02:631-02:643N, 02:645-02:651, 02:653-02:656, 02:658-02:677, 02:679, 02:681-02:700, 02:703-02:704, 02:706-02:713, 02:715N-02:720, 02:722-02:727, 02:729-02:737, 02:739-02:740, 02:742-02:748N, 02:750, 02:752-02:753, 02:755-02:756, 02:758-02:763, 02:765-02:770, 02:772, 02:774-02:777, 02:779-02:786, 02:788N-02:803N, 02:806N-02:807N, 02:809-	*01:104, 01:134, 01:229, 03:09, 03:89:01-03:89:02, 03:108, 03:172, 03:198, 11:06, 11:18, 11:312, 25:11, 26:03:01:01-26:03:01:02, 26:06, 26:21, 26:30, 26:36, 26:78, 26:92, 26:111, 26:146, 26:177, 26:193, 29:19, 29:74, 30:13, 30:16, 30:44, 30:46, 30:127, 32:08, 33:24, 33:184, 68:05, 68:15, 68:20, 74:06, 74:21, 80:01:01:01 ^w



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:814, 02:816-02:820, 02:823-02:828, 02:830-02:839, 02:841 ^w , 02:843-02:854, 02:856-02:858N, 02:860-02:892, 02:894- 02:896N, 02:898-02:905, 02:908-02:911, 02:913-02:914	
2	240 bp	1070 bp	*02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:81, 02:01:83-02:04, 02:07:01:01-02:07:14, 02:09:01:01- 02:09:01:02, 02:12-02:13, 02:15N-02:20:02, 02:22:01:01-02:22:02, 02:24:01-02:27, 02:29- 02:34, 02:36-02:40:02, 02:42:01-02:43N, 02:45-02:47, 02:49:01-02:50, 02:52-02:53N, 02:55-02:56:02, 02:58-02:60:02, 02:62-02:68, 02:70-02:71, 02:73-02:77, 02:80, 02:82N- 02:83N, 02:85-02:86:02, 02:88N-02:89:02, 02:92-02:97:02, 02:101:01-02:105, 02:107, 02:109-02:111, 02:113:01N-02:121, 02:123, 02:125N, 02:130-02:135, 02:138-02:141, 02:145, 02:147-02:153:02, 02:155-02:168, 02:171:01-02:171:02, 02:173-02:177, 02:181- 02:228, 02:230-02:231, 02:233:01-02:242, 02:245-02:246, 02:249-02:258, 02:260- 02:270, 02:272-02:277, 02:279-02:285, 02:287-02:289:02, 02:291-02:294, 02:296, 02:299, 02:301N-02:307, 02:309, 02:311- 02:323, 02:325-02:327, 02:329, 02:332, 02:334-02:336, 02:338-02:343, 02:345- 02:354, 02:356N-02:357, 02:360-02:365, 02:367-02:372, 02:374-02:375, 02:377- 02:381, 02:383-02:386, 02:388-02:397, 02:399-02:403, 02:406-02:408, 02:410- 02:412, 02:414, 02:416-02:418, 02:422- 02:427, 02:429-02:432, 02:434-02:437Q, 02:439N-02:452, 02:455-02:456, 02:458- 02:464, 02:466-02:469, 02:477-02:483, 02:485-02:488, 02:491-02:492, 02:498- 02:502, 02:504-02:505, 02:508-02:513, 02:515-02:526, 02:528:01-02:531, 02:533, 02:535-02:545, 02:547-02:548, 02:551- 02:557, 02:559-02:570:02, 02:573-02:576, 02:578, 02:581Q-02:583, 02:585-02:588, 02:590, 02:594-02:601, 02:603-02:622N, 02:624, 02:628-02:629, 02:632-02:643N, 02:645, 02:647-02:654, 02:656-02:669, 02:671, 02:673-02:675N, 02:677-02:696N, 02:699-02:700, 02:702-02:704, 02:706- 02:713, 02:716-02:717, 02:719-02:722, 02:724, 02:726, 02:728Q-02:730, 02:732- 02:736, 02:739-02:740, 02:742-02:746, 02:748N, 02:750, 02:752-02:753, 02:755- 02:756, 02:758, 02:761-02:765, 02:769- 02:772, 02:774-02:777, 02:779-02:789N, 02:792N-02:799, 02:802-02:804, 02:806N, 02:809-02:812, 02:816, 02:819-02:820, 02:822-02:828, 02:830-02:836, 02:838- 02:842, 02:844-02:850, 02:852-02:862,	*01:134, 01:229, 03:01:69, 03:09, 03:89:01-03:89:02, 03:108, 03:172, 03:198, 03:330N, 24:28, 24:89, 24:379, 30:13, 30:16, 30:44, 30:46, 74:01:05, 74:06, 74:21



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

3⁵	175 bp	1070 bp	02:864:01:01-02:876, 02:879N-02:885, 02:887N, 02:889-02:892, 02:894-02:897, 02:899-02:905, 02:908-02:914 *02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:81, 02:01:83-02:03:10, 02:05:01:01-02:16, 02:18, 02:20:01-02:22:02, 02:24:01-02:38, 02:40:01-02:43N, 02:45- 02:56:02, 02:58-02:64:02, 02:66-02:78, 02:80-02:85, 02:87-02:97:02, 02:99:01- 02:99:02, 02:101:01-02:107, 02:109, 02:111- 02:134, 02:136-02:148, 02:150:01-02:151, 02:153:01-02:155, 02:157:01-02:189, 02:191- 02:193, 02:195-02:223N, 02:225N-02:267, 02:269-02:299, 02:301N-02:302, 02:304- 02:308, 02:310-02:333, 02:335-02:337, 02:339-02:370, 02:372-02:399, 02:401- 02:407, 02:409-02:435, 02:437Q, 02:439N- 02:525N, 02:527-02:557, 02:559-02:562, 02:564-02:616, 02:618Q, 02:620-02:656, 02:658-02:663, 02:665-02:679, 02:681- 02:709, 02:711-02:733, 02:735, 02:737- 02:803N, 02:805Q-02:828, 02:830-02:837, 02:839-02:841, 02:843-02:855, 02:857- 02:859, 02:861-02:889, 02:891-02:900, 02:902-02:914	*68:02:01:01-68:02:15, 68:15, 68:18N, 68:23, 68:27:01-68:28, 68:31, 68:34, 68:40, 68:48, 68:51, 68:53-68:54, 68:60-68:62, 68:64, 68:67, 68:74, 68:77- 68:78, 68:80-68:82, 68:86, 68:92, 68:97, 68:105, 68:110, 68:124-68:125, 68:128, 68:138, 68:140, 68:147, 68:153, 68:160, 68:163, 68:169-68:170, 68:174, 68:178, 68:184, 68:186-68:187, 68:193, 68:198, 68:201, 68:216N, 68:219, 68:225, 69:01:01:01-69:08
4⁴	80 bp	1070 bp	*02:01:01:01-02:01:15, 02:01:18-02:01:19, 02:01:21-02:01:51, 02:01:53-02:01:62, 02:01:64-02:01:73, 02:01:75-02:01:81, 02:01:83-02:01:112, 02:01:114-02:01:127, 02:01:129-02:01:180, 02:03:01-02:04, 02:06:01:01-02:06:11, 02:06:13-02:06:19, 02:06:21-02:07:14, 02:09:01:01-02:13, 02:15N-02:22:02, 02:24:01-02:35:01, 02:35:03-02:44, 02:45 ^w , 02:46, 02:49:01- 02:49:02, 02:51-02:54, 02:56:01 ^w , 02:57- 02:62, 02:64:01-02:77, 02:78 ^w , 02:79:01- 02:97:02, 02:99:01-02:99:02, 02:101:01- 02:102, 02:104-02:114, 02:116-02:121, 02:123-02:128, 02:130-02:143, 02:145- 02:153:02, 02:156-02:168, 02:170-02:171:02, 02:173-02:175, 02:177-02:178, 02:180- 02:184, 02:187-02:194, 02:196-02:204, 02:207-02:208, 02:210-02:228, 02:230- 02:231, 02:233:01-02:270, 02:272-02:285, 02:287-02:314N, 02:316-02:319, 02:322- 02:323, 02:325-02:336, 02:338-02:343, 02:345-02:358, 02:360-02:371, 02:374- 02:375, 02:377, 02:379-02:381, 02:383- 02:412, 02:415-02:420, 02:422-02:432, 02:434-02:481, 02:483, 02:485-02:488, 02:490N-02:491, 02:493-02:494, 02:497- 02:503, 02:505-02:506N, 02:508-02:516N, 02:518-02:526, 02:528:01-02:530, 02:533- 02:545, 02:547-02:570:02, 02:573-02:576, 02:578-02:590, 02:591:02-02:592, 02:594- 02:600, 02:602, 02:604-02:622N, 02:624-	*01:01:68 ^w , 01:69:02 ^w , 01:83:02, 03:01:03 ^w , 03:23:01, 03:89:01, 03:198, 11:70:02, 11:121, 23:01:21, 24:02:76, 24:310:02, 26:07:02, 29:02:23, 29:48, 33:01:02, 33:08-33:09, 68:01:41, 68:30, 74:04



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:625, 02:627-02:630, 02:632-02:635, 02:637-02:642, 02:645, 02:647-02:654, 02:656-02:666, 02:668-02:669, 02:671- 02:675N, 02:677-02:696N, 02:698-02:708, 02:710N-02:716, 02:718-02:728Q, 02:730, 02:732-02:733, 02:735-02:755, 02:757-02:765, 02:767-02:777, 02:779- 02:789N, 02:792N-02:798, 02:801-02:806N, 02:808-02:816, 02:819-02:825, 02:827Q- 02:828, 02:830-02:836, 02:838-02:842, 02:844-02:866, 02:868-02:871N, 02:873- 02:880N, 02:882-02:906, 02:908-02:914	
5 ⁴	125 bp	1070 bp	*02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:81, 02:01:83-02:01:180, 02:04, 02:06:01:01-02:07:14, 02:09:01:01- 02:11:09, 02:14-02:18, 02:20:01-02:21, 02:25-02:26, 02:28-02:36, 02:39-02:43N, 02:45-02:46, 02:48, 02:51-02:53N, 02:55- 02:62, 02:64:01-02:64:02, 02:66-02:67, 02:68 ^w , 02:69-02:97:02, 02:99:01-02:99:02, 02:101:01-02:101:02, 02:103, 02:105-02:114, 02:116, 02:118-02:121, 02:123-02:134, 02:138-02:141, 02:143-02:147, 02:149- 02:151, 02:153:01-02:153:02, 02:156- 02:171:02, 02:173-02:178, 02:180-02:181, 02:183-02:185, 02:187-02:190, 02:192- 02:208, 02:210-02:221, 02:223N-02:225N, 02:227N-02:228, 02:231, 02:233:01-02:252, 02:254-02:257, 02:259-02:263, 02:265- 02:266, 02:268-02:270, 02:272-02:273, 02:275-02:279, 02:282-02:285, 02:287- 02:308, 02:310-02:314N, 02:316-02:319, 02:321N-02:322, 02:325-02:336, 02:338- 02:343, 02:346-02:354, 02:356N-02:358, 02:360-02:369, 02:371-02:372, 02:374- 02:375, 02:377-02:381, 02:383-02:401, 02:404-02:411, 02:414-02:416, 02:418- 02:420, 02:422-02:426, 02:428-02:430, 02:432, 02:434-02:438, 02:440Q-02:446, 02:448-02:462, 02:464-02:465, 02:467- 02:479, 02:481-02:483, 02:485-02:488, 02:490N-02:491, 02:493-02:494, 02:497- 02:502, 02:504, 02:506N, 02:508-02:516N, 02:518-02:526, 02:528:01-02:528:02, 02:530, 02:533-02:542, 02:545, 02:547-02:556, 02:558-02:567, 02:569-02:571, 02:573- 02:576, 02:578-02:581Q, 02:583-02:590, 02:592, 02:594, 02:596-02:600, 02:602- 02:611, 02:613-02:625, 02:627-02:629, 02:632, 02:635, 02:637-02:640, 02:642, 02:644-02:645, 02:647-02:650, 02:652- 02:654, 02:656-02:661, 02:663-02:665, 02:668-02:669, 02:671-02:675N, 02:677- 02:679, 02:681, 02:685-02:692, 02:695- 02:699, 02:701-02:707, 02:710N, 02:712- 02:716, 02:718-02:722, 02:724-02:730,	*03:17:01, 03:171, 23:01:01:01-23:01:30, 23:04-23:65, 23:67-23:68, 23:71-23:82, 23:84N- 23:104, 23:106N-23:108N, 24:02:16, 24:13:01- 24:13:02, 24:18, 24:24, 24:94, 24:188, 24:207:01- 24:207:02, 24:228, 24:315, 24:355, 24:392, 29:101:01, 30:61, 30:74, 31:67-31:68, 32:28, 32:66, 33:32:01, 68:08:01:01-68:08:02, 68:63, 68:157, 68:168, 69:01:01:01-69:02, 69:04- 69:05, 69:07-69:08, B*40:323:02, B*51:136, C*07:204:01, C*07:482



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:732-02:733, 02:735-02:757, 02:759-02:765, 02:767-02:773N, 02:776-02:777, 02:779-02:789N, 02:792N-02:798, 02:800-02:803N, 02:805Q-02:806N, 02:808, 02:810, 02:812-02:816, 02:818-02:825, 02:827Q-02:828, 02:830-02:832N, 02:834-02:837, 02:839, 02:842, 02:844-02:847, 02:851-02:853, 02:855-02:859, 02:861-02:866, 02:868-02:871N, 02:873-02:880N, 02:882-02:900, 02:902-02:906, 02:908-02:909, 02:911-02:912	
6 ^{4,5}	75 bp	800 bp	*02:02:01:01-02:03:10, 02:05:01:01-02:05:10, 02:08, 02:22:01:01-02:22:02, 02:47, 02:49:01-02:50, 02:63, 02:102, 02:104, 02:115, 02:117, 02:122, 02:136, 02:148, 02:154-02:155, 02:172, 02:179, 02:186, 02:191, 02:209, 02:229-02:230, 02:232, 02:253, 02:258, 02:264:01:01-02:264:01:02, 02:267, 02:281, 02:286, 02:315, 02:320, 02:323-02:324, 02:337, 02:344-02:345, 02:355, 02:359, 02:370, 02:373N, 02:376, 02:382, 02:412, 02:421, 02:427, 02:431, 02:433, 02:447, 02:463, 02:466, 02:480, 02:484, 02:489, 02:492, 02:495-02:496, 02:505, 02:507, 02:517, 02:527, 02:529, 02:531-02:532, 02:544, 02:546, 02:557, 02:568, 02:572, 02:577, 02:582, 02:591:01-02:591:02, 02:593, 02:595, 02:601, 02:612, 02:626, 02:631, 02:633-02:634, 02:636, 02:641, 02:643N, 02:646, 02:651, 02:655, 02:666-02:667, 02:670, 02:676, 02:680, 02:682-02:684, 02:709, 02:711, 02:717, 02:731, 02:734, 02:766, 02:774-02:775N, 02:778, 02:791N, 02:799, 02:807N, 02:809, 02:817, 02:826Q, 02:833N, 02:841, 02:843, 02:849-02:850, 02:854, 02:860, 02:867, 02:872, 02:881, 02:907, 02:914	*24:138, 68:01:01:01-68:01:13, 68:01:15-68:07, 68:10-68:25, 68:27:01-68:47, 68:49N, 68:51-68:62, 68:64-68:107, 68:109-68:110, 68:112:01-68:112:02, 68:114, 68:116-68:128, 68:130:01-68:133, 68:135-68:136, 68:138-68:156, 68:158-68:167, 68:169-68:170, 68:172-68:179, 68:181N-68:199N, 68:201-68:203N, 68:205N-68:217, 68:219-68:229, 68:231
7 ⁶	170 bp	1070 bp	*02:02:01:01-02:02:05, 02:05:01:01-02:05:10, 02:08, 02:14, 02:47, 02:63, 02:102, 02:115, 02:154-02:155, 02:172, 02:179, 02:186, 02:209, 02:229, 02:232, 02:286, 02:320, 02:324, 02:337, 02:344, 02:359, 02:373N, 02:376, 02:413, 02:421, 02:433, 02:484, 02:489, 02:492, 02:495-02:496, 02:507, 02:517, 02:531-02:532, 02:542, 02:546, 02:572, 02:577, 02:591:01-02:591:02, 02:593, 02:601, 02:626, 02:636, 02:643N, 02:646, 02:655, 02:667, 02:670, 02:676, 02:709, 02:717, 02:731, 02:734, 02:766, 02:778, 02:790-02:791N, 02:799, 02:807N, 02:817-02:818, 02:826Q, 02:843, 02:867, 02:872, 02:881, 02:907	
	210 bp		*02:540N	*31:126N, C*02:38:02N
8	415 bp	1070 bp	*02:02:01:01-02:02:02, 02:02:04-02:02:05, 02:05:01:01-02:05:10, 02:14, 02:47, 02:63, 02:102, 02:115, 02:154-02:155, 02:172,	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

	505 bp		02:179, 02:186, 02:209, 02:229, 02:232, 02:271, 02:286, 02:320, 02:324, 02:337, 02:344, 02:359, 02:373N, 02:376, 02:413, 02:421, 02:433, 02:484, 02:489, 02:492, 02:495-02:496, 02:507, 02:517, 02:531- 02:532, 02:546, 02:572, 02:577, 02:591:01- 02:591:02, 02:593, 02:601, 02:626, 02:636, 02:643N, 02:646, 02:655, 02:667, 02:670, 02:676, 02:709, 02:717, 02:731, 02:734, 02:766, 02:778, 02:790-02:791N, 02:799, 02:807N, 02:817-02:818, 02:826Q, 02:843, 02:867, 02:872, 02:881, 02:907 *02:32N	
9⁴	105 bp	1070 bp	*02:03:01-02:03:10, 02:25, 02:38, 02:117, 02:148, 02:171:01-02:171:02, 02:230, 02:253, 02:258, 02:264:01:01-02:264:01:02, 02:267, 02:280-02:281, 02:315, 02:345, 02:355, 02:370, 02:412, 02:427, 02:431, 02:447, 02:463, 02:466, 02:480, 02:505, 02:529, 02:544, 02:557, 02:568, 02:595, 02:612, 02:633-02:634, 02:641, 02:666, 02:684, 02:711, 02:774-02:775N, 02:809, 02:833N, 02:849-02:850, 02:854, 02:860, 02:914	*24:99, 26:10, 68:184
10⁴	115 bp	800 bp	*02:03:01-02:03:10, 02:13, 02:26, 02:38, 02:99:01-02:99:02, 02:117, 02:148, 02:171:01-02:171:02, 02:230, 02:253, 02:258, 02:264:01:01-02:264:01:02, 02:280-02:281, 02:315, 02:323, 02:345, 02:355, 02:370, 02:393, 02:402, 02:412, 02:427, 02:431, 02:447, 02:463, 02:466, 02:480, 02:489, 02:505, 02:529, 02:541, 02:544, 02:557, 02:568, 02:589, 02:592, 02:595, 02:612, 02:619:01-02:619:02, 02:633-02:634, 02:641, 02:666, 02:684, 02:711, 02:774-02:775N, 02:782, 02:809, 02:833N, 02:838, 02:849- 02:850, 02:854, 02:856, 02:860, 02:914	*03:17:01, 24:18, 24:56, 24:177, 24:355, 24:367, 24:381, 26:10, 68:42, 68:54, 68:61, 68:63, 68:183, 68:204, B*51:136, C*12:37
11^{6,7,8}	135 bp 225 bp 350 bp	1070 bp	*02:506N *02:89:01 *02:04, 02:17:02:01-02:17:04, 02:57, 02:65, 02:108, 02:110, 02:152, 02:268, 02:300, 02:303, 02:334, 02:617, 02:657, 02:664, 02:680, 02:710N, 02:804, 02:890	*23:12, 24:28, 24:30, 24:42, 24:89, 24:309, 24:379, 29:19, 29:48, 29:74, 32:08, 33:24, 33:184, 68:05, 68:20, 74:06, 74:21
12	235 bp	1070 bp	*02:05:01:01-02:06:28, 02:08, 02:10, 02:14, 02:21, 02:28, 02:41, 02:44, 02:51, 02:54, 02:57, 02:61, 02:72, 02:79:01-02:79:02, 02:84, 02:91, 02:99:01-02:99:02, 02:106, 02:108, 02:122, 02:126-02:127, 02:137, 02:142-02:144, 02:154, 02:169-02:170, 02:172, 02:178-02:180, 02:229, 02:232, 02:244, 02:248, 02:259, 02:271, 02:278, 02:286, 02:290, 02:295, 02:300, 02:310, 02:324, 02:328, 02:330, 02:333, 02:337, 02:344, 02:355, 02:358-02:359, 02:373N,	*11:06, 11:18, 11:312, 26:03:01:01-26:03:01:02, 26:06, 26:21, 26:30, 26:78, 26:92, 26:111, 26:193, 68:05, 68:15, 68:20



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:376, 02:382, 02:387, 02:398, 02:404-02:405, 02:409, 02:413, 02:415, 02:419:01-02:421, 02:428, 02:433, 02:438, 02:453-02:454, 02:465, 02:470-02:476N, 02:484, 02:489, 02:493, 02:495-02:496, 02:506N-02:507, 02:527, 02:532, 02:546, 02:549-02:550, 02:558, 02:572, 02:577, 02:591:01-02:593, 02:602, 02:623, 02:625-02:626, 02:630-02:631, 02:646, 02:655, 02:670, 02:672Q, 02:676, 02:697-02:698, 02:718, 02:723, 02:725, 02:727, 02:731, 02:737, 02:759-02:760N, 02:766-02:768, 02:778, 02:790-02:791N, 02:800-02:801, 02:805Q, 02:807N, 02:813-02:814, 02:817-02:818, 02:837, 02:843, 02:851, 02:863, 02:877-02:878, 02:886, 02:888, 02:898	
13⁷	145 bp	800 bp	*02:05:01:01-02:05:10, 02:08, 02:14, 02:154, 02:172, 02:179, 02:229, 02:232, 02:271, 02:286, 02:324, 02:337, 02:344, 02:359, 02:373N, 02:376, 02:382, 02:413, 02:421, 02:433, 02:484, 02:489, 02:495, 02:507, 02:527, 02:532, 02:546, 02:572, 02:577, 02:593, 02:623, 02:626, 02:631, 02:646, 02:655, 02:670, 02:676, 02:731, 02:766, 02:778, 02:790-02:791N, 02:807N, 02:817-02:818, 02:829, 02:843	*66:21, 68:135
14^{4,7}	95 bp 170 bp	800 bp	*02:91, 02:322 *02:07:01:01-02:07:14, 02:15N, 02:18, 02:103, 02:112, 02:130, 02:191, 02:219, 02:255, 02:261, 02:265, 02:282, 02:319, 02:335, 02:369, 02:403, 02:426, 02:429, 02:432, 02:437Q, 02:449-02:452, 02:474, 02:477-02:478, 02:513, 02:541, 02:544, 02:566-02:567, 02:575, 02:583, 02:586, 02:622N, 02:652, 02:678, 02:721, 02:764, 02:771, 02:787, 02:822, 02:840, 02:855, 02:859, 02:897, 02:912	
15^{4,7}	125 bp 250 bp	800 bp	*02:21, 02:186, 02:587, 02:667, 02:764 *02:34 ^w , 02:87, 02:112, 02:129, 02:136, 02:139 02:571 *02:96	*23:01:13, 24:340, B*51:01:58, B*53:01:10
16⁴	305 bp 110 bp	800 bp	*02:50, 02:73, 02:93:01-02:93:02, 02:122, 02:156, 02:172, 02:279, 02:594, 02:631, 02:651	*01:88:02-01:88:03, 01:236, 11:119:01-11:119:02, 11:209, 23:31, 23:45, 23:55, 24:15, 24:41, 24:51, 24:92, 24:235, 26:10, 32:28, 32:66, 68:02:01:01-68:02:15, 68:15, 68:18N, 68:25, 68:27:01-68:28, 68:31, 68:34, 68:40, 68:44, 68:48-68:49N, 68:51, 68:53-68:54, 68:60-68:62, 68:64, 68:67, 68:74, 68:77-68:78, 68:80-68:82, 68:86, 68:92, 68:97, 68:110, 68:119:01-



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

	155 bp		*02:09:01:01-02:09:01:02, 02:49:01-02:49:02, 02:597	68:119:02, 68:124-68:125, 68:128, 68:138, 68:147, 68:153, 68:160, 68:163, 68:169-68:170, 68:174, 68:178, 68:184, 68:186-68:187, 68:193, 68:198, 68:201, 68:216N, 68:219, 68:225, 69:04, B*07:136:02, B*40:323:02, B*44:59:02, B*44:136, B*51:136, C*07:204:01, C*07:482, C*12:37
17⁷	205 bp 360 bp	1070 bp	*02:83N *02:10, 02:17:02:01-02:17:04, 02:39, 02:108, 02:110, 02:148, 02:242, 02:244, 02:268, 02:300, 02:303, 02:398, 02:453, 02:604, 02:617, 02:628, 02:630, 02:657, 02:680, 02:804	*23:12, 24:28, 24:30, 24:42, 24:89, 24:309, 24:379
18⁹	175 bp	1070 bp	*02:11:01:01-02:11:01:03, 02:11:03-02:11:09, 02:29, 02:69, 02:128, 02:297-02:298, 02:308, 02:395N, 02:457, 02:490N, 02:494, 02:503, 02:514N, 02:579, 02:584, 02:589, 02:701, 02:705, 02:714, 02:738, 02:751, 02:754, 02:757, 02:773N, 02:780, 02:808, 02:815, 02:821, 02:893, 02:906	*33:108
19	225 bp	1070 bp	*02:12-02:13, 02:19, 02:27, 02:37-02:38, 02:44, 02:54, 02:142, 02:280, 02:417, 02:543, 02:630, 02:662, 02:723, 02:840	*11:288, 24:14:01:01-24:14:01:04, 24:93, 24:324, 69:03
20⁷	135 bp 170 bp 260 bp 295 bp 320 bp	800 bp	*02:200 *02:229 *02:198 *02:49:01, 02:682-02:683, 02:848, 02:910 *02:672Q	
21	155 bp 220 bp 255 bp	1070 bp	*02:09:01:01-02:09:01:02, 02:49:01-02:49:02, 02:597 *02:15N, 02:356N *02:291	
22	160 bp	1070 bp	*02:19, 02:36-02:37, 02:54, 02:255, 02:417, 02:723, 02:804, 02:848, 02:883	*01:88:02-01:88:03, 01:236, 11:209, 23:01:01:01-23:02, 23:05-23:42, 23:44-23:68, 23:71-23:78, 23:80-23:82, 23:84N-23:107Q, 24:02:01:01-24:02:41, 24:02:43-24:02:69, 24:02:71-24:02:135, 24:04-24:09N, 24:11N, 24:13:01-24:15, 24:17, 24:19-24:20:01:02, 24:23 ^w , 24:24-24:32, 24:34-24:64, 24:66-24:74:02, 24:76-24:93, 24:95-24:109,



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

				24:111-24:124, 24:126-24:137, 24:139-24:157, 24:159-24:166, 24:168-24:203, 24:205-24:206, 24:209, 24:212-24:218, 24:220-24:282, 24:284-24:288, 24:290-24:298, 24:301-24:314, 24:316-24:338, 24:341-24:348, 24:350-24:356, 24:358-24:373, 24:375-24:386, 24:388N-24:389N, 24:391-24:440, 24:442-24:458, 24:460, 24:462-24:470, 24:472-24:482, 24:484, 33:19, 68:26, 68:65, 68:115, 68:131
23	140 bp 180 bp	800 bp	*02:31, 02:161, 02:360, 02:387 *02:17:02:01-02:17:04, 02:108, 02:110, 02:268, 02:300, 02:303, 02:617, 02:657, 02:680	*24:94, 24:138, 24:188, 24:228, 24:293
24⁴	75 bp 110 bp	1070 bp	*02:230, 02:459 *02:27, 02:393, 02:541, 02:589, 02:592 02:662, 02:682	*01:88:02-01:88:03, 01:236, 11:119:01-11:119:02, 24:59, 24:190, 24:210, 24:229, 24:285, 24:395, C*07:204:01, C*07:482
	160 bp 200 bp		*02:233:01 *02:227N	*24:219
25⁶	135 bp	1070 bp	*02:16, 02:131:01:01-02:131:02, 02:226N, 02:487, 02:560, 02:693	*24:55, 24:315, 24:374, 68:157, 68:171:02N, B*07:136:02, B*40:323:02
	160 bp 190 bp		*02:283, 02:468:01N, 02:895N *02:384	*24:02:70
26⁴	125 bp 165 bp 260 bp 305 bp	800 bp	*02:33 *02:52 *02:198 *02:696N	
27^{4,7}	95 bp 145 bp	1070 bp	*02:28, 02:155, 02:185, 02:601 *02:10, 02:50, 02:52, 02:73, 02:93:01, 02:95, 02:110, 02:114, 02:117, 02:122, 02:156, 02:242, 02:244, 02:279, 02:282, 02:300, 02:304, 02:339, 02:407, 02:409, 02:449, 02:453, 02:527, 02:580, 02:582, 02:630-02:631, 02:651, 02:681, 02:705, 02:743, 02:890	*30:13, 30:16, 30:44, 30:46 *03:123:01-03:123:02, 03:171, 11:16, 11:35, 11:57, 11:73, 11:158, 24:131, 24:138, 24:188, 24:218, 29:51, 29:73, 32:109, 68:01:01:01-68:11N, 68:13:01-68:48, 68:51-68:116, 68:118-68:119:02, 68:121:01-68:128, 68:130:01-68:130:02, 68:132-68:172, 68:175-68:199N, 68:201-68:204, 68:206-68:229, 68:231
	175 bp		*02:597	*68:126



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

28	540 bp	800 bp	*02:28, 02:155, 02:185, 02:601, 02:705	
	235 bp		*02:08, 02:20:01-02:20:02, 02:55-02:56:02, 02:62, 02:78, 02:103, 02:128, 02:169, 02:195, 02:415, 02:634, 02:644, 02:815, 02:829	
29	220 bp	1070 bp	*02:45-02:46, 02:48, 02:56:01 ^w -02:56:02 ^w , 02:78 ^w , 02:92, 02:103 ^w , 02:129, 02:169 ^w , 02:195 ^w , 02:358, 02:369, 02:571, 02:829 ^w	
			*11:199:02 ^w , 23:01:13, 24:340, 30:166 ^w	
30	300 bp	800 bp	*02:180	
	130 bp		*02:163, 02:583, 02:618Q	
31 ^{4,5,7}	160 bp	800 bp	*02:43N, 02:104	
	210 bp		*02:608N	
32 ^{4,7}	95 bp	800 bp	*02:82N, 02:773N	
	220 bp		*02:45, 02:56:01-02:56:02, 02:78, 02:103, 02:169, 02:195, 02:829	
33 ^{6,7}	85 bp	1070 bp	*02:675N	
	120 bp		*02:131:01-02:131:02, 02:691N, 02:820	
			*01:37:01:01-01:37:01:02, 03:360, 11:172, 24:155N, 24:438, 26:160, 29:75, 30:15	
	205 bp		*02:176	
	240 bp		*02:46-02:48, 02:70, 02:129, 02:479, 02:571	
33 ^{6,7}	155 bp	800 bp	*02:165, 02:168, 02:400, 02:420-02:421	
	195 bp		*02:85, 02:757	
	240 bp		*02:19, 02:36-02:37, 02:54, 02:255, 02:417, 02:696N, 02:723, 02:848, 02:883	
			*25:08, 26:47, 66:18	
34 ^{4,5,7,8,11}	120 bp	800 bp	*01:20, 01:66, 01:73, 01:130, 24:14:01:01-24:14:01:04, 24:52, 24:291, 24:324, 25:36, 25:65, 26:29, 26:49, 66:10, B*07:64, B*15:12:01-15:12:03, B*15:19, B*15:270, B*15:298, B*15:304N, C*04:95N	
	170 bp		*03:01:59, 11:199:02, 30:01:01:01-30:01:17, 30:08:01-30:08:02, 30:11:01-30:11:02, 30:14L-30:20, 30:23-30:24, 30:26, 30:30-30:31, 30:35-30:43, 30:48-30:49, 30:52-30:56, 30:58-30:60, 30:62-30:63, 30:65, 30:72-30:75, 30:78N-30:79, 30:81-30:83, 30:86-30:87, 30:89, 30:91-30:95, 30:97-30:98, 30:102, 30:104, 30:106, 30:109-30:116, 30:118, 30:120, 30:122-30:123N, 30:125-30:126, 30:128-30:132N, 30:134-30:138, 30:140-30:143, 30:145N, 30:147-30:148, 30:154, 30:159, 30:161, 30:163-30:165, 68:01:11,	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

				68:01:25, 68:02:07, 69:07, C*03:82
35⁴	110 bp	1070 bp	*02:40:01-02:40:02, 02:51, 02:130	*23:01:01:01-23:01:30, 23:02 ^w , 23:04-23:23, 23:25-23:33, 23:35-23:56, 23:58-23:65, 23:67-23:68, 23:71-23:82, 23:84N- 23:103N, 23:105-23:108N, 24:24, 24:71, 24:315, 24:392, 29:101:01, 31:67-31:68, 32:28, 32:66, 33:32:01, 68:51 ^w , 68:168, B*40:323:02
36⁴	155 bp 85 bp 445 bp	1070 bp	*02:77 *02:94N *02:24:01-02:24:02, 02:65, 02:135, 02:137, 02:152, 02:309, 02:507, 02:901	*01:104, 01:134, 01:229, 03:09, 03:89:01-03:89:02, 03:108, 03:172, 03:198, 11:06, 11:18, 11:312, 25:11, 26:03:01:01- 26:03:01:02, 26:06, 26:21, 26:30, 26:36, 26:78, 26:92, 26:111, 26:146, 26:177, 26:193, 29:19, 29:48, 29:74, 30:13, 30:16, 30:44, 30:46, 30:127, 32:08, 33:24, 33:184, 74:06, 74:21, 80:01:01:01 ^w
37	145 bp	1070 bp	*02:38, 02:101:01-02:101:02, 02:154, 02:447, 02:543, 02:838, 02:848 ^w , 02:883 ^w	*01:88:02 ^w -01:88:03 ^w , 01:236 ^w , 11:119:01- 11:119:02, 23:10 ^w , 24:10:01:01-24:10:02, 24:46 ^w , 24:210, 24:300, 24:340, 26:10, 68:61, 68:134
38⁴	125 bp	800 bp	*02:41, 02:80, 02:117, 02:289:01-02:289:02, 02:304, 02:454, 02:872 *02:210, 02:217:01, 02:451 *02:351	*32:109
39^{4,5}	195 bp 225 bp 80 bp 170 bp 240 bp 265 bp 300 bp	1070 bp	*02:390 *02:18 *02:153:01-02:153:02, 02:293Q, 02:439N *02:159, 02:912 *02:170, 02:364	
40^{4,7}	100 bp 220 bp 250 bp	1070 bp	*02:52, 02:67, 02:404, 02:423, 02:855 *02:40:01-02:40:02, 02:51, 02:130, 02:500Q *02:153:01-02:153:02	*30:47 *29:22, 31:99, 33:22
41⁷	85 bp 185 bp	1070 bp	*02:675N *02:02:01:01-02:02:05, 02:05:01:01-02:05:10, 02:08, 02:14, 02:17:02:01-02:17:04, 02:47, 02:57-02:58, 02:63, 02:75, 02:102, 02:108, 02:110, 02:115, 02:154-02:155, 02:172, 02:179, 02:186, 02:209, 02:229, 02:232, 02:271, 02:286, 02:300, 02:303, 02:320, 02:324, 02:337, 02:344, 02:359, 02:373N,	*24:94, 24:138, 24:188, 24:228, 24:293, B*15:343 , C*01:129, C*04:363 , C*05:125, C*07:386 , C*07:700, C*12:94 , C*14:48



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:376, 02:413, 02:421, 02:433, 02:484, 02:489, 02:492, 02:495-02:496, 02:507, 02:517, 02:527, 02:531-02:532, 02:546, 02:572, 02:577, 02:591:01-02:591:02, 02:593, 02:601, 02:617, 02:626, 02:631, 02:636, 02:643N, 02:646, 02:655, 02:657, 02:667, 02:670, 02:676, 02:680, 02:709, 02:717, 02:731, 02:766, 02:778, 02:790-02:791N, 02:799, 02:807N, 02:817-02:818, 02:826Q, 02:843, 02:867, 02:872, 02:881, 02:907	
42^{6,7}	220 bp 245 bp	800 bp	*02:143, 02:217:01-02:217:02, 02:419:01- 02:419:02, 02:881 *02:34-02:35:03, 02:56:01-02:56:02, 02:62, 02:78, 02:103, 02:580, 02:741, 02:907	
43	180 bp 225 bp	800 bp	*02:71 *02:03:01-02:03:10, 02:22:01:01-02:22:02, 02:49:01-02:49:02, 02:104, 02:117, 02:136, 02:148, 02:191, 02:230, 02:253, 02:258, 02:264:01:01-02:264:01:02, 02:267, 02:281, 02:315, 02:323, 02:345, 02:355, 02:370, 02:382, 02:402, 02:412, 02:427, 02:431, 02:447, 02:463, 02:466, 02:480, 02:505, 02:529, 02:544, 02:557, 02:568, 02:582, 02:595, 02:612, 02:633-02:634, 02:641, 02:651, 02:666, 02:682-02:684, 02:711, 02:774-02:775N, 02:809, 02:833N, 02:838, 02:841, 02:849-02:850, 02:854, 02:860, 02:914	*26:22, 66:09, 68:83, 68:105, C*02:74
44⁴	125 bp 165 bp 200 bp	800 bp	*02:203 *02:59, 02:220, 02:513, 02:564, 02:602 *02:222N, 02:342	*03:385 *11:247
45⁴	105 bp 160 bp 185 bp	1070 bp	*02:60:01-02:60:02, 02:254, 02:594 *02:391 *02:19, 02:39, 02:44, 02:79:01-02:79:02, 02:86:01-02:86:02, 02:400, 02:408, 02:436, 02:619:01-02:619:02, 02:856, 02:860, 02:901	*01:20, 01:66, 01:130, 03:95, 03:343, 11:288, 24:14:01:01-24:14:01:04, 24:93, 24:324
46^{6,7}	270 bp 135 bp 205 bp	1070 bp	*02:501N *02:66 *02:61	
47	165 bp 205 bp 255 bp	800 bp	*02:63 *02:144, 02:205 *02:35:01-02:35:03, 02:48, 02:78, 02:90, 02:331, 02:580, 02:741, 02:907	*11:199:02, 34:02:04, 68:01:32
48⁴	305 bp 110 bp	1070 bp	*02:207 *02:64:01-02:64:02, 02:177-02:178, 02:412, 02:676, 02:678	
49⁴	115 bp	1070 bp	*02:27, 02:267, 02:408, 02:476N, 02:590, 02:662, 02:682	*01:88:02-01:88:03, 01:236, 11:119:01- 11:119:02, 24:59, 24:190, 24:210, 24:229, 24:285, 24:395, 68:230, C*07:204:01, C*07:482
50	165 bp 145 bp	800 bp	*02:283 *02:01:01:02L	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

51	410 bp	1070 bp	*02:65, 02:80, 02:114, 02:117, 02:152, 02:246, 02:279, 02:304, 02:406, 02:527, 02:582, 02:662, 02:872	*01:104, 01:134, 01:229, 03:09, 03:89:01-03:89:02, 03:108, 03:172, 03:198, 11:06, 11:18, 11:312, 29:19, 29:48, 29:74, 32:08, 33:24, 33:184, 68:05, 68:20, 74:06, 74:21, 80:01:01:01 ^w
52	175 bp	800 bp	*02:76:01-02:76:02, 02:220, 02:319, 02:434, 02:666	*23:01:21, 24:02:76, 24:310:02, 30:22
53	215 bp	1070 bp	*02:14, 02:17:02:01-02:17:04, 02:57-02:58, 02:108, 02:110, 02:300, 02:303, 02:490N, 02:516N, 02:617, 02:657, 02:818	*03:75, 03:269N, 03:347, 03:377, 23:01:01:01- 23:01:15, 23:01:17- 23:01:30, 23:03:01-23:13, 23:14:02-23:33, 23:35- 23:65, 23:67-23:68, 23:70- 23:103N, 23:106N- 23:108N, 24:13:01, 24:18, 24:24, 24:94, 24:188, 24:207:01, 24:228, 24:355, 24:392, 29:07, 30:52, 30:80, 30:113, 31:29, 31:60N, 31:146, 32:89, 32:132N, 33:187, C*06:04:02
54^{6,7}	240 bp 310 bp 350 bp	800 bp	*02:189-02:190, 02:438 *02:228 *02:74:01-02:74:02, 02:655, 02:783	
55^{4,5}	85 bp 160 bp 205 bp	1070 bp	*02:343 *02:486 *02:01:83, 02:01:105, 02:01:107, 02:01:129, 02:01:138, 02:13, 02:26, 02:30:01-02:30:02, 02:40:01-02:40:02, 02:49:02, 02:51, 02:99:01- 02:99:02, 02:130, 02:226N, 02:323, 02:393, 02:399, 02:402, 02:541, 02:547, 02:589, 02:592, 02:598, 02:619:01-02:619:02, 02:668, 02:693, 02:699, 02:701, 02:782, 02:801, 02:811, 02:838, 02:856, 02:859, 02:879N *02:313	*03:95, 03:343, 29:22, 31:99, 33:22, B*08:204, C*02:74
56	265 bp 150 bp 180 bp 275 bp	1070 bp	*02:175, 02:181 *02:173, 02:496 *02:53N, 02:81, 02:124, 02:829	
57^{4,6}	105 bp 145 bp	1070 bp	*02:42:01, 02:310, 02:528:01-02:528:02 *02:160, 02:175	
58	255 bp	800 bp	*02:11:01:01-02:11:09, 02:35:01-02:35:03, 02:48, 02:69, 02:78, 02:90, 02:128, 02:297- 02:298, 02:308, 02:331, 02:457, 02:490N, 02:494, 02:503, 02:514N, 02:579-02:580, 02:584, 02:589, 02:701, 02:705, 02:714, 02:738, 02:741, 02:751, 02:754, 02:757, 02:773N, 02:808, 02:815, 02:821, 02:893, 02:906-02:907	*11:199:02, 34:02:04, 68:01:32
59⁷	145 bp 190 bp 210 bp	800 bp	*02:97:01-02:97:02 *02:305N *02:608N	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

60⁷	345 bp	1070 bp	*02:50, 02:65, 02:73, 02:122, 02:135, 02:152, 02:245, 02:334, 02:890	*25:11, 26:03:01:01-26:03:01:02, 26:06, 26:21, 26:30, 26:36, 26:78, 26:92, 26:111, 26:146, 26:177, 26:193, 29:19, 29:48, 29:74, 32:08, 33:24, 33:184, 68:05, 68:15, 68:20, 74:06, 74:21
61⁷	185 bp	1070 bp	*02:50, 02:73, 02:122, 02:156, 02:245, 02:334, 02:338, 02:890	*03:123:01-03:123:02, 03:171, 11:16, 11:35, 11:57, 11:73, 11:158, 29:51, 29:73, 32:109, 68:01:01:01-68:11N, 68:13:01-68:43:02, 68:45-68:48, 68:51-68:82, 68:84-68:104:02, 68:106-68:116, 68:118-68:128, 68:130:01-68:130:02, 68:132-68:144, 68:146-68:199N, 68:201-68:229, 68:231
62	180 bp	800 bp	*02:69, 02:122, 02:179, 02:614, 02:625, 02:651, 02:822	*68:01:01:01-68:01:50, 68:01:52-68:32, 68:34-68:95, 68:97-68:163, 68:165-68:189, 68:191-68:231
63⁴	60 bp	800 bp	*02:25, 02:171:02	*03:248, 25:19:01-25:19:02, 25:30, 26:43:01, 31:113, 34:02:01:01-34:02:01:03, 34:02:03-34:02:06, 34:04, 34:07-34:10N, 34:13, 34:15, 34:20-34:21, 66:06
	95 bp		*02:259, 02:524:01-02:524:02	*03:51:01-03:51:02, 23:60, 30:37, 31:122, 32:46, B*44:03:47
	155 bp 210 bp		*02:105, 02:301N *02:490N, 02:516N, 02:540N, 02:605Q	*03:269N, 31:60N, 31:126N, 32:132N
64⁴	125 bp 180 bp	1070 bp	*02:106, 02:145 *02:164:01, 02:221, 02:392, 02:564, 02:593	*24:72 *01:44, 01:129, 03:44:01, 03:341, 03:385, 11:196, 11:201, 23:41, 24:245, 24:286, 29:15, 29:108, 30:162, 31:78
	260 bp		*02:187	
65⁷	150 bp 185 bp 250 bp	1070 bp	*02:160, 02:251, 02:391, 02:486 *02:107 *02:202, 02:437Q, 02:440Q, 02:500Q, 02:581Q	
66	170 bp 200 bp	800 bp	*02:109, 02:434, 02:709 *02:30:01-02:30:02, 02:547, 02:598	
67⁴	100 bp 140 bp 180 bp 300 bp	800 bp	*02:91, 02:177, 02:322 *02:111, 02:407, 02:449, 02:460 *02:210, 02:330, 02:451, 02:679 *02:350N	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

68	210 bp 255 bp	1070 bp	*02:113:01N-02:113:02N, 02:321N *02:158, 02:184	
69	170 bp 225 bp 335 bp	1070 bp	*02:114, 02:246, 02:279, 02:527, 02:582, 02:662 *02:260 *02:166	
70⁴	125 bp 180 bp 285 bp	800 bp	*02:115 *02:133, 02:367, 02:487 *02:53N, 02:192, 02:269, 02:433	
71⁷	210 bp	800 bp	*02:01:01:01-02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:37, 02:01:39-02:01:81, 02:01:83-02:22:02, 02:24:01-02:29, 02:31-02:44, 02:45 ^w , 02:46-02:47, 02:49:01- 02:54, 02:56:01 ^w , 02:57-02:77, 02:78 ^w , 02:79:01-02:97:02, 02:99:01-02:99:02, 02:101:01-02:102, 02:104-02:128, 02:130- 02:168, 02:170-02:194, 02:196-02:235, 02:237-02:546, 02:548-02:570:02, 02:572- 02:597, 02:599-02:643N, 02:645, 02:647- 02:773N, 02:775N-02:805Q, 02:807N-02:828, 02:830-02:914	*01:01:68 ^w , 01:69:02 ^w , 01:83:01-01:83:02, 03:01:03 ^w , 03:23:01-03:23:02, 03:89:01-03:89:02, 03:198, 11:70:01-11:70:02, 11:121, 23:01:21, 23:80, 24:02:76, 24:42, 24:89, 24:310:01- 24:310:02, 24:409, 25:46, 26:07:01-26:07:02, 26:92, 29:02:23, 29:48, 30:22, 31:109, 32:93, 33:01:02, 33:08-33:09, 68:01:41, 68:30, 74:04, 74:21, B*07:02:80, B*35:01:60, B*51:01:34, B*58:01:24, B*58:97, B*78:01:02, C*07:02:27, C*07:577
72^{4,7}	120 bp 240 bp	1070 bp	*02:183, 02:691N *02:19, 02:44, 02:118, 02:135, 02:149, 02:152, 02:189, 02:190, 02:309, 02:402, 02:408, 02:417, 02:436, 02:438, 02:619:01- 02:619:02, 02:723, 02:782, 02:804, 02:829, 02:838, 02:842, 02:906	*24:155N
73^{4,6}	80 bp 120 bp 200 bp 250 bp	800 bp	*02:263 *02:380, 02:528:01-02:528:02, 02:553 *02:119 *02:146, 02:158, 02:644, 02:749	*03:52, 30:109, 31:19
74	175 bp 250 bp	800 bp	*02:120, 02:549 *02:187, 02:223N	B*35:01:60, B*51:01:34, B*58:01:24, B*78:01:02
75^{4,7}	100 bp 165 bp 200 bp	1070 bp	*02:373N *02:166, 02:437Q, 02:581Q *02:121, 02:384, 02:425, 02:517, 02:562, 02:850	*68:49N *24:350 *23:47, 24:102, 24:234, 24:339, 24:347:02, 68:14, 68:81, 68:158, C*12:37^w
76⁴	115 bp 190 bp 225 bp	800 bp	*02:68 *02:342, 02:392, 02:593 *02:50, 02:122, 02:143, 02:225N, 02:556	*03:341, 11:247, 24:245
77^{4,6}	80 bp 115 bp 260 bp	800 bp	*02:123, 02:295, 02:344 *02:162, 02:525N *02:366N	
78⁴	80 bp 130 bp 240 bp 545 bp	1070 bp	*02:193 *02:84, 02:213, 02:495 *02:124 *02:01:14Q	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

				*01:01:38L, 11:01:98, 24:02:03Q, 33:03:03Q
79⁴	115 bp 225 bp 270 bp	1070 bp	*02:525N *02:125N, 02:217:02, 02:419:01, 02:881 *02:53N, 02:146, 02:184, 02:192, 02:433, 02:644, 02:749	
80⁴	85 bp 135 bp 230 bp 545 bp	1070 bp	*02:214 *02:194, 02:558 *02:126 *02:01:14Q	*01:01:38L, 11:01:98, 24:02:03Q, 33:03:03Q
81^{4,6}	110 bp 235 bp 310 bp	800 bp	*02:183 *02:165, 02:400, 02:420-02:421 *02:127, 02:167, 02:299, 02:477	
82	225 bp 255 bp 295 bp 390 bp	1070 bp	*02:481 *02:291 *02:199 *02:514N	
83⁴	100 bp 125 bp 205 bp 240 bp 265 bp	800 bp	*02:132 *02:215, 02:429, 02:467 *02:85, 02:757 *02:132, 02:237, 02:440Q, 02:500Q, 02:809 *02:313	*03:95, 03:343
84^{4,6}	125 bp 180 bp 205 bp 250 bp	800 bp	*02:618Q *02:133, 02:164:01, 02:173, 02:487, 02:496 *02:315 *02:250N, 02:348, 02:394	*03:234Q *01:44, 03:44:01, 29:108
85	170 bp 215 bp 260 bp	800 bp	*02:314N, 02:376, 02:542, 02:622N *02:481, 02:605Q *02:134	*03:197N, 32:48N
86	180 bp 255 bp 310 bp	800 bp	*02:135, 02:309, 02:454 *02:174 *02:228	
87^{4,6}	110 bp 150 bp 210 bp 260 bp 305 bp	800 bp	*02:380 *02:138, 02:181 *02:284N *02:394 *02:498	*03:52, 30:109, 31:19
88⁶	135 bp 260 bp 305 bp	800 bp	*02:188, 02:235 *02:366N *02:498	B*15:67, B*15:343, B*35:110, B*58:77, C*07:386, C*07:700, C*12:94, C*14:48
89^{4,7}	120 bp 155 bp 200 bp	800 bp	*02:140, 02:182, 02:821 *02:324, 02:426, 02:468:01N-02:468:02N, 02:836, 02:895N *02:227N, 02:562	*24:133, 26:99, 29:130, 31:48, 33:15 *24:02:70, 31:125 *24:102
90⁴	100 bp 130 bp 190 bp 255 bp	800 bp	*02:72, 02:206, 02:275, 02:377, 02:641 *02:161 *02:141 *02:01:02:01-02:01:02:02, 02:05:07, 02:06:05, 02:06:09, 02:07:14, 02:50,	*01:134, 01:229, 03:09, 03:89:02, 03:108, 03:172,



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

			02:76:02, 02:99:02, 02:122, 02:243:03, 02:591:01, 02:666	03:198, 03:330N, 11:06, 11:18, 11:312, 26:03:01:01-26:03:01:02, 26:06, 26:21, 26:30, 26:78, 26:92, 26:177, 26:193, 29:19, 29:48, 30:13, 30:16, 30:44, 30:46, 33:24, 33:184, 68:05, 68:15, 68:20, 74:06, 74:21, C*06:247
91^{4,7}	115 bp	800 bp	*02:50, 02:73, 02:93:01-02:93:02, 02:122, 02:156, 02:162, 02:172, 02:211:01-02:211:02, 02:279, 02:594, 02:631, 02:651, 02:817	*01:88:02-01:88:03, 01:236, 11:119:01- 11:119:02, 11:209, 23:31, 23:45, 23:55, 24:15, 24:41, 24:51, 24:92, 24:235, 24:261, 24:445N, 26:10, 32:28, 32:66, 68:02:01:01- 68:02:15, 68:15, 68:18N, 68:25, 68:27:01-68:28, 68:31, 68:34, 68:40, 68:44, 68:48-68:49N, 68:51, 68:53-68:54, 68:60-68:62, 68:64, 68:67, 68:74, 68:76:01-68:78, 68:80- 68:82, 68:86, 68:92, 68:97, 68:110, 68:119:01- 68:119:02, 68:124-68:125, 68:128, 68:138, 68:147, 68:153, 68:160, 68:163, 68:169-68:170, 68:174, 68:178, 68:184, 68:186- 68:187, 68:193, 68:198, 68:201, 68:216N, 68:219, 68:225, 69:04, B*07:136:02, B*40:323:02, B*44:59:02, B*44:136, B*51:136, C*07:204:01, C*07:482, C*12:37
92	235 bp	1070 bp	*02:01:01:01-02:01:01:134Q, 02:01:03- 02:01:15, 02:01:17-02:01:19, 02:01:21-02:01:30, 02:01:32-02:01:81, 02:01:83-02:05:06, 02:05:08-02:06:04, 02:06:06-02:06:08, 02:06:10-02:07:13, 02:09:01:01-02:19, 02:21-02:22:02, 02:24:01- 02:49:02, 02:51-02:54, 02:57-02:61, 02:63- 02:76:01, 02:77, 02:79:01-02:97:02, 02:99:01, 02:101:01-02:102, 02:104-02:121, 02:123- 02:127, 02:129-02:168, 02:170-02:194, 02:196-02:235, 02:237-02:243:02, 02:244- 02:249, 02:251-02:414, 02:416-02:590, 02:591:02-02:608N, 02:610:01-02:633, 02:635-02:643N, 02:645, 02:647-02:665, 02:667-02:773N, 02:775N-02:805Q, 02:807N- 02:814, 02:816-02:828, 02:830-02:914	
93⁶	130 bp	800 bp	*02:163, 02:583	



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

	245 bp		*02:147, 02:339, 02:348	*03:170, 23:52, 24:73, 24:157, 24:453, 31:120, 32:119, 66:32, B*15:173 , B*15:477 , B*18:63 , B*39:90
94^{4,6}	295 bp		*02:157:01-02:157:02, 02:473	
	110 bp	800 bp	*02:325, 02:377, 02:641	
	150 bp		*02:360	
	175 bp		*02:597	
	210 bp		*02:150:01	
	360 bp		*02:197:01-02:197:02, 02:478, 02:494, 02:745, 02:783	
95	135 bp	800 bp	*02:52, 02:105, 02:147, 02:151, 02:188, 02:339	*68:06, B*15:67 , B*15:343 , B*35:110 , B*58:77 , C*01:129 , C*07:386 , C*07:700 , C*12:94 , C*14:48
96¹²	-	-	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-A*02 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 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including Taq polymerase
101.412-24u/04u – without Taq polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: 2L5

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.

⁵The specific primers in primer mixes 3, 6, 31, 34, 39 and 55 may give rise to a lower yield of HLA-specific PCR product than the other A*02 primer mixes.

⁶Primer mixes 7, 11, 25, 33, 42, 46, 54, 57, 73, 77, 81, 84, 87, 88, 93 and 94 have a tendency giving rise to primer oligomer formation, most pronounced in primer mix 46.

⁷Primer mixes 11, 13, 14, 15, 17, 20, 27, 31, 32, 33, 34, 40, 41, 42, 46, 54, 59, 60, 61, 65, 71, 72, 75, 89 and 91 may have tendencies of unspecific amplifications, most pronounced in primer mixes 33, 41 and 91.

⁸Primer mixes 11 and 34 may give rise to a long fragment of approx. 600 bp in some HLA-A alleles. This band should not be considered in the interpretation of HLA-A*02 typings.

⁹Primer mix 18 may faintly amplify the C*04:01:01:01-04:01:120 alleles.

¹⁰For some samples primer mix 1 may amplify the A*02:07:01-02:07:15 alleles.

¹¹Primer mix 34 may give rise to a lower yield of HLA-specific PCR product than the other HLA-A*02 high resolution primer mixes for the A*30 alleles.

¹²Primer mix 96 contains a negative control, which will amplify the 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 product generated by the HGH positive control primer pair is 200 base pairs.

Abbreviations

'w', might be weakly amplified.



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec. PCR product	360	240	175	80	125	75	170	415	105	115	135	235
							210	505			225	
											350	
Length of int. pos. control ¹	800	1070	1070	1070	1070	800	1070	1070	1070	800	1070	1070
5'-primer(s) ²	292	81	362	200	453	506	369	270	453	453	292	98
	5'-CTC 3'	5'-CAG 3'	5'-gAg 3'	5'-CCA 3'	5'-AAA 3'	5'-gCA 3'	5'-TAG 3'	5'-AAA 3'	5'-AAA 3'	5'-AAA 3'	5'-CTC 3'	5'-CTA 3'
	292	96	362		453		402		453	453	648	
	5'-CCC 3'	5'-TTT 3'	5'-gAg 3'		5'-AAA 3'		5'-CTg 3'		5'-AAA 3'	5'-AAA 3'	5'-CAA 3'	
		98					409				737	
		5'-CTT 3'					5'-ggA 3'				5'-ggA 3'	
		102										
		5'-ACA 3'										
3'-primer(s) ³	368	292	497	240	539	539	538	402	517	527	362	292
	5'-CAT 3'	5'-gTg 3'	5'-Tgg 3'	5'-ggA 3'	5'-TCA 3'	5'-TCC 3'	5'-CAA 3'	5'-CgC 3'	5'-CgT 3'	5'-CCT 3'	5'-TCA 3'	5'-gTg 3'
	368	294	497	241	543		538	493			362	
	5'-CAT 3'	5'-CgA 3'	5'-Tgg 3'	5'-CgC 3'	5'-gCC 3'		5'-CCA 3'	5'-CTA 3'			5'-TCA 3'	
			497								831	
			5'-Tgg 3'								5'-TCC 3'	

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec. PCR product	145	95	125	110	205	175	225	135	155	160	140	75
		170	250	155	360			170	220		180	110
			305					260	255			160
								295				200
								320				
Length of int. pos. control ¹	800	800	800	800	1070	1070	1070	800	1070	1070	800	1070
5'-primer(s) ²	98	368	78	385	292	144	355	78	666	453	185	453
	5'-CTA 3'	5'-gTg 3'	5'-TCT 3'	5'-ggC 3'	5'-CTC 3'	5'-gCA 3'	5'-CCg 3'	5'-TCT 3'	5'-gAA 3'	5'-AAA 3'	5'-CAA 3'	5'-AAA 3'
		445		666	666			2 nd I			194	
		5'-TCT 3'		5'-gAA 3'	5'-gAA 3'			5'-CCA 3'			5'-Cgg 3'	
											205	
											5'-ggg 3'	
											368	
											5'-gTT 3'	
3'-primer(s) ³	200	497	160	453	368	268	538	170	779	570	292	487
	5'-TCC 3'	5'-Tgg 3'	5'-gTT 3'	5'-TCT 3'	5'-CAA 3'	5'-TTg 3'	5'-CTg 3'	5'-Cgg 3'	5'-CTT 3'	5'-CCg 3'	5'-gTg 3'	5'-TgT 3'
			160	779	829	268		413	843		506	524
			5'-gTg 3'	5'-CTT 3'	5'-CTA 3'	5'-TTA 3'		5'-ggC 3'	5'-gTT 3'		5'-TgT 3'	5'-CAC 3'
			277			290		505	880			527
			5'-ggT 3'			5'-CAA 3'		5'-gTA 3'	5'-gAA 3'			5'-CCg 3'
			302					538				571
			5'-ggT 3'					5'-CCg 3'				5'-CCg 3'
			343					563				610
			5'-A 3'					5'-CgT 3'				5'-CTA 3'



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec.	135	125	95	235	220	130	95	85	155	120	110	85
PCR product	160	165	145		300	160	220	120	195	170	155	445
	190	260	175			210		205	240			
		305	540					240				
Length of int. pos. control ¹	1070	800	1070	800	1070	800	800	1070	800	800	1070	1070
5'-primer(s) ²	453	2 nd I	160	78	78	529	78	78	362	144	453	292
	5'-AAA 3'	5'-CCA 3'	5'-ACT 3'	5'-TCT 3'	5'-TCT 3'	5'-TgA 3'	5'-TCT 3'	5'-TCT 3'	5'-gAg 3'	5'-gCA 3'	5'-AAA 3'	5'-CTC 3'
			238			533	564	741	362	420		
			5'-AgA 3'			5'-gA 3'	5'-TgA 3'	5'-g.C 3'	5'-gAg 3'	5'-TAg 3'		
			391			666		755		420		
			5'-ACg 3'			5'-gAA 3'		5'-CAT 3'		5'-TAg 3'		
			391					789				
			5'-ACg 3'					5'-g.A 3'				
			397									
			5'-gCC 3'									
3'-primer(s) ³	538	368	292	270	257	616	256	241	473	268	524	335
	5'-CTA 3'	5'-CAG 3'	5'-gTg 3'	5'-ACg 3'	5'-CCT 3'	5'-CgT 3'	5'-CTg 3'	5'-CgT 3'	5'-CgA 3'	5'-TTA 3'	5'-CAC 3'	5'-gC 3'
	559	411	497	270	337	781	616	265	482	282	524	453
	5'-CTC 3'	5'-TCA 3'	5'-Tgg 3'	5'-ACA 3'	5'-CTg 3'	5'-CCC 3'	5'-CgT 3'	5'-CCC 3'	5'-Tgg 3'	5'-gAC 3'	5'-CAC 3'	5'-TCg 3'
	573	505				791		290	518	282	569	
	5'-AgT 3'	5'-gTA 3'				5'-AgT 3'		5'-gAC 3'	5'-CCA 3'	5'-gAC 3'	5'-ACA 3'	
	575	549				835		831	549	497		
	5'-ggT 3'	5'-AgT 3'				5'-CTA 3'		5'-TCC 3'	5'-AgT 3'	5'-Tgg 3'		
	604								570			
	5'-CgC 3'								5'-CCg 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	48
Length of spec.	145	125	80	100	85	220	180	125	105	135	165	110
PCR product		195	170	220	185	245	225	165	160	205	205	
		225	240	250				200	185		255	
			265						270		305	
			300									
Length of int. pos. control ¹	1070	800	1070	1070	1070	800	800	800	1070	1070	800	1070
5'-primer(s) ²	453	98	355	355	355	78	355	110	355	78	78	419
	5'-AAA 3'	5'-CTT 3'	5'-CCg 3'	5'-CCg 3'	5'-CCC 3'	5'-TCT 3'	5'-CCg 3'	5'-gTg 3'	5'-CCg 3'	5'-TCT 3'	5'-TCT 3'	5'-gTC 3'
		353			692			125		652		431
		5'-CAG 3'			5'-gAA 3'			5'-CgA 3'		5'-CTg 3'		5'-CgC 3'
		414			789			157				
		5'-CAA 3'			5'-g.A 3'			5'-TgA 3'				
		414						451				
		5'-CAG 3'						5'-TgT 3'				
								463				
								5'-TgT 3'				
								482				
								5'-ggT 3'				
3'-primer(s) ³	559	255	394	403	506	255	494	240	419	241	203	497
	5'-CCT 3'	5'-CTg 3'	5'-gCT 3'	5'-gCA 3'	5'-TgT 3'	5'-CTg 3'	5'-TCC 3'	5'-ggA 3'	5'-CgA 3'	5'-CgC 3'	5'-TCA 3'	5'-Tgg 3'
	559	281	485	418	831	255	539	616	475	746	242	
	5'-CCg 3'	5'-AgC 3'	5'-CCT 3'	5'-gTg 3'	5'-TCC 3'	5'-Cgg 3'	5'-TCC 3'	5'-CgT 3'	5'-Cgg 3'	5'-ggA 3'	5'-CCA 3'	
		497	553	524		282			497		290	
		5'-Tgg 3'	5'-CTA 3'	5'-CAC 3'		5'-gAC 3'			5'-TgA 3'		5'-CAG 3'	
			564	524		282			497		340	
			5'-ACC 3'	5'-CAC 3'		5'-gAC 3'			5'-TgA 3'		5'-ggT 3'	
			565	545					585			
			5'-CAT 3'	5'-AgT 3'					5'-AgC 3'			
			578	565								
			5'-Tgg 3'	5'-CAT 3'								
			613									
			5'-gCA 3'									
Well No.	37	38	39	40	41	42	43	44	45	46	47	48



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Well No.	49	50	51	52	53	54	55	56	57	58	59	60
Length of spec. PCR product	115 165	145	410	175	215	240 310 350	85 160 205 265	150 180 275	105 145	255	145 190 210	345
Length of int. pos. control ¹	1070	800	1070	800	1070	800	1070	1070	1070	800	800	1070
5'-primer(s) ²	453 5'-AAA 3'	2 nd I 5'-ATC 3'	292 5'-CTC 3'	98 5'-CTC 3'	355 5'-CCC 3'	2 nd I 5'-CCA 3'	81 5'-CAG 3'	78 5'-TCT 3'	78 5'-TCT 3'	78 5'-TCT 3'	666 5'-gAA 3'	292 5'-CTC 3'
				110 5'-gTg 3'	375 5'-TgA 3'		355 5'-CCg 3'					
				115 5'-ggA 3'								
3'-primer(s) ³	513 5'-TCT 3'	4 5'-ggC 3'	418 5'-gTC 3'	240 5'-ggA 3'	538 5'-CAA 3'	475 5'-CgA 3'	240 5'-ggA 3'	187 5'-gTA 3'	142 5'-TgA 3'	292 5'-gTC 3'	768 5'-gTA 3'	355 5'-gAT 3'
	527 5'-CCg 3'					497 5'-Tgg 3'	400 5'-gAA 3'	187 5'-gTg 3'	145 5'-CAT 3'		768 5'-gTg 3'	
	575 5'-ggT 3'					557 5'-TgT 3'	476 5'-CCA 3'	218 5'-gCA 3'	184 5'-gCC 3'		814 5'-CA. 3'	
						595 5'-CCg 3'	517 5'-CgC 3'	302 5'-ggC 3'	187 5'-gTA 3'		835 5'-CTA 3'	
						595 5'-CCT 3'	577 5'-gCA 3'	324 5'-TAC 3'				
Well No.	49	50	51	52	53	54	55	56	57	58	59	60

Well No.	61	62	63	64	65	66	67	68	69	70	71	72
Length of spec. PCR product	185	180	60 95 155 210	125 180 260	150 185 250	170 200	100 140 180 300	210 255	170 225 335	125 180 285	210	120 240
Length of int. pos. control ¹	1070	800	800	1070	1070	800	800	1070	1070	800	800	1070
5'-primer(s) ²	355 5'-CCA 3'	666 5'-gAA 3'	369 5'-TAG 3'	395 5'-gCA 3'	78 5'-TCT 3'	81 5'-CAG 3'	78 5'-TCT 3'	78 5'-TCT 3'	78 5'-TCT 3'	78 5'-TCT 3'	81 5'-CAC 3'	2 nd I 5'-CCA 3'
			375 5'-Tgg 3'	478 5'-CgA 3'	355 5'-CCT 3'	112 5'-CgA 3'	353 5'-CAG 3'		2 nd I 5'-CCA 3'		81 5'-CAC 3'	741 5'-gC 3'
			375 5'-TgA 3'	482 5'-ggT 3'		115 5'-ggA 3'	386 5'-gTT 3'					
			420 5'-TAT 3'	484 5'-ACT 3'		397 5'-gCC 3'						
			427 5'-A.g 3'	484 5'-ACg 3'		406 5'-gCA 3'						
			485 5'-CAC 3'	530 5'-ggT 3'		431 5'-CgC 3'						
			517 5'-AgA 3'			445 5'-TCT 3'						
3'-primer(s) ³	497 5'-Tgg 3'	806 5'-CCA 3'	538 5'-CAA 3'	616 5'-CgT 3'	184 5'-GCC 3'	240 5'-ggA 3'	218 5'-gCT 3'	244 5'-CTA 3'	263 5'-gTA 3'	164 5'-gCT 3'	240 5'-ggA 3'	353 5'-CgA 3'
					221 5'-ACA 3'		337 5'-CTA 3'	251 5'-CCT 3'	413 5'-gCC 3'	218 5'-gCC 3'	256 5'-CCC 3'	475 5'-CgA 3'
					456 5'-TCg 3'		497 5'-Tgg 3'	252 5'-TCT 3'	578 5'-TgT 3'	221 5'-ACC 3'		506 5'-TgC 3'
					475 5'-Cgg 3'			289 5'-AgC 3'		319 5'-gCT 3'		831 5'-TCC 3'
					476 5'-CCA 3'			299 5'-CCT 3'		326 5'-TgC 3'		
					559 5'-CTC 3'							
					562 5'-gCg 3'							
					565 5'-CAg 3'							
Well No.	61	62	63	64	65	66	67	68	69	70	71	72



0197

For In Vitro Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Well No.	73	74	75	76	77	78	79	80	81	82	83	84
Length of spec.	80	175	100	115	80	80	115	85	110	225	100	125
PCR product	120	250	165	190	115	130	225	135	235	255	125	180
	200		200	225	260	240	270	230	310	295	205	205
	250					545		545		390	240	250
											265	
Length of int. pos. control ¹	800	800	1070	800	800	1070	1070	1070	800	1070	800	800
5'-primer(s) ²	78 5'-TCT 3'	103 5'-CCg 3'	453 5'-AAA 3'	48 5'-gCT 3'	78 5'-TCT 3'	355 5'-CCT 3'	78 5'-TCT 3'	359 5'-CCg 3'	2 nd I 5'-CCA 3'	249 5'-TAG 3'	355 5'-CCg 3'	78 5'-TCT 3'
	488 5'-ggT 3'	104 5'-ATA 3'		441 5'-TAA 3'	385 5'-ggA 3'	364 5'-ggg 3'		404 5'-CCC 3'		341 5'-ggg 3'	808 5'-CgA 3'	415 5'-ACA 3'
	520 5'-CgT 3'	395 5'-gCA 3'		463 5'-TgT 3'		417 5'-CAC 3'		3 rd I 5'-ATA 3'		666 5'-gAA 3'		484 5'-ACT 3'
		415 5'-ACT 3'		478 5'-CgA 3'		3 rd I 5'-ATA 3'		666 5'-gAA 3'				533 5'-gA 3'
				542 5'-gAA 3'		666 5'-gAA 3'						
3'-primer(s) ³	145 5'-CAT 3'	240 5'-ggA 3'	514 5'-CTA 3'	106 5'-CAT 3'	119 5'-ggT 3'	453 5'-TCT 3'	153 5'-ACT 3'	453 5'-TCT 3'	353 5'-CgA 3'	355 5'-gAC 3'	434 5'-CCC 3'	218 5'-gCA 3'
	164 5'-gCC 3'	616 5'-CgT 3'	563 5'-CgA 3'	616 5'-CgT 3'	121 5'-gCA 3'	705 5'-TCT 3'	255 5'-Cgg 3'	705 5'-TCT 3'	482 5'-Tgg 3'	850 5'-ATT 3'	442 5'-gAC 3'	221 5'-ACC 3'
	239 5'-gAT 3'		578 5'-TgT 3'		153 5'-ACT 3'	866 5'-AAA 3'	260 5'-T.T 3'	853 5'-CAT 3'	553 5'-CTT 3'	880 5'-gAA 3'	518 5'-CCA 3'	241 5'-CgA 3'
	289 5'-AgC 3'		604 5'-CgC 3'		295 5'-TCA 3'		299 5'-TCg 3'		559 5'-CTT 3'		555 5'-CCA 3'	284 5'-..g 3'
	299 5'-TCg 3'		616 5'-CgC 3'		453 5'-TCT 3'		299 5'-CCT 3'				562 5'-gCg 3'	296 5'-CTT 3'
	559 5'-CgT 3'		617 5'-CCA 3'				319 5'-gCT 3'				577 5'-gCA 3'	616 5'-CgT 3'
											868 5'-CAA 3'	
											899 5'-ACg 3'	
Well No.	73	74	75	76	77	78	79	80	81	82	83	84



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

Well No.	85	86	87	88	89	90	91	92	93	94	95
Length of spec.	170	180	110	135	120	100	115	235	130	110	135
PCR product	215	255	150	260	155	130			245	150	
	260	310	210	305	200	190			295	175	
			260			255				210	
			305							360	
Length of int.	800	800	800	800	800	800	800	1070	800	800	800
pos. control ¹											
5'-primer(s) ²	375	2 nd I	78	78	453	78	379	78	364	124	412
	5'-Tgg 3'	5'-CCA 3'	5'-TCT 3'	5'-TCT 3'	5'-AAA 3'	5'-TCC 3'	5'-ACC 3'	5'-TCT 3'	5'-ggT 3'	5'-gCA 3'	5'-ATg 3'
	409		392	419	652	143	379		364	160	
	5'-ggA 3'		5'-CTA 3'	5'-gTC 3'	5'-CTg 3'	5'-CgT 3'	5'-ACT 3'		5'-ggC 3'	5'-ACT 3'	
	411		488			205	385		409	185	
	5'-TAg 3'		5'-ggT 3'			5'-ggg 3'	5'-ggC 3'		5'-ggC 3'	5'-CAA 3'	
	420					229	385		415	223	
	5'-TAA 3'					5'-TAC 3'	5'-ggA 3'		5'-ACA 3'	5'-Cgg 3'	
	666					235			529	229	
	5'-gAA 3'					5'-AgA 3'			5'-TgA 3'	5'-TAC 3'	
						244				2 nd I	
						5'-CgC 3'				5'-CCA 3'	
3'-primer(s) ³	538	423	187	175	542	292	453	270	616	292	506
	5'-CAA 3'	5'-TAA 3'	5'-gTg 3'	5'-CCA 3'	5'-CTg 3'	5'-gTg 3'	5'-TCT 3'	5'-ACT 3'	5'-CgT 3'	5'-gTg 3'	5'-TgT 3'
	801	502	193	295	572			270		605	
	5'-CAC 3'	5'-CTg 3'	5'-Cgg 3'	5'-TCA 3'	5'-gCT 3'			5'-ACT 3'		5'-gCA 3'	
	850	557	296	343	573						
	5'-ATT 3'	5'-TgT 3'	5'-CTT 3'	5'-T 3'	5'-AgT 3'						
	884		343	506	610						
	5'-ggA 3'		5'-T 3'	5'-TgT 3'	5'-CTA 3'						
			559		617						
			5'-CgT 3'		5'-CCA 3'						
					727						
					5'-CCA 3'						
					763						
					5'-CAT 3'						
Well No.	85	86	87	88	89	90	91	92	93	94	95

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 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

CELL LINE VALIDATION SHEET																					
HLA-A*02 SSP subtyping kit ²																					
						Well															
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					Prod. No.:	201907101	201907102	201780203	201780204	201780205	201780206	201780207	201780208	201890009	201780210	201780211	202020712	202020713	201780214	202020715	201780216
	IHWC cell line ¹		A*	A*																	
1	9001	SA	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*30:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*02:01	*26:03		+	+	+	+	+	-	-	-	-	-	-	+	-	-	-	-
7	9020	QBL	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:01	*80:01		W	-	-	-	-	-	-	-	-	-	-	W	-	-	-	-
18	9257	32367	*33:03	*74:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*02:17			-	+	-	+	+	-	-	-	-	-	-	+	-	-	-	-
22	9056	KOSE	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*02:01	*34:01		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*33:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*02:05			+	-	+	-	-	+	+	+	-	-	-	+	+	-	-	-
27	9191	CH1007	*24:10	*29:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*02:01	*29:02		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*30:01	*68:02		-	-	+	-	-	+	-	-	-	-	-	-	-	-	-	+
31	9019	DUCAF	*30:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*02:06	*11:01		+	-	+	+	+	-	-	-	-	-	-	+	-	-	-	-
37	9065	HHKB	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*02:17			-	+	-	+	+	-	-	-	-	-	-	+	-	-	-	-
39	9315	CML	*01:01	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*02:07	*30:01		-	+	+	+	+	-	-	-	-	-	-	-	-	+	-	-
41	9055	H0301	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*02:07			+	+	+	+	+	-	-	-	-	-	-	-	-	+	-	-
43	9076	T7526	*02:06	*02:07		+	+	+	+	+	-	-	-	-	-	-	+	-	+	-	-
44	9057	TEM	*66:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*23:01	*24:02		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*02:16	*03:01		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*02:01	*11:01		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot-specific information

CELL LINE VALIDATION SHEET																																	
HLA-A*02 SSP subtyping kit ²																																	
					Prod. No.:	Well																											
						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32												
						201780217	201780218	201780219	201907120	201780221	201780222	201780223	202020724	201907125	201890026	201890027	201780228	202020729	201780230	201780231	201907132												
	IHCW cell line ¹		A*	A*																													
1	9001	SA	*24:02			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-												
2	9280	LK707	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
3	9011	E4181324	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
4	9275	GU373	*30:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
5	9009	KAS011	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
6	9353	SM	*02:01	*26:03		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
7	9020	QBL	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
8	9025	DEU	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
9	9026	YAR	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
10	9107	LKT3	*24:02			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-												
11	9051	PITOUT	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
12	9052	DBB	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
13	9004	JESTHOM	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
14	9071	OLGA	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
15	9075	DKB	*24:02			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-												
16	9037	SWEIG007	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
17	9282	CTM3953540	*03:01	*80:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
18	9257	32367	*33:03	*74:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
19	9038	BM16	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
20	9059	SLE005	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
21	9064	AMALA	*02:17			+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-												
22	9056	KOSE	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
23	9124	IHL	*02:01	*34:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
24	9035	JBUSH	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
25	9049	IBW9	*33:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
26	9285	WT49	*02:05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
27	9191	CH1007	*24:10	*29:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
28	9320	BEL5GB	*02:01	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
29	9050	MOU	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
30	9021	RSH	*30:01	*68:02		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-												
31	9019	DUCAF	*30:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
32	9297	HAG	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
33	9098	MT14B	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
34	9104	DHIF	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
35	9302	SSTO	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
36	9024	KT17	*02:06	*11:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
37	9065	HHKB	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
38	9099	LZL	*02:17			+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-												
39	9315	CML	*01:01	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
40	9134	WHONP199	*02:07	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
41	9055	H0301	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
42	9066	TAB089	*02:07			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
43	9076	T7526	*02:06	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
44	9057	TEM	*66:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
45	9239	SHJO	*23:01	*24:02		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-												
46	9013	SCHU	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
47	9045	TUBO	*02:16	*03:01		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-												
48	9303	TER-ND	*02:01	*11:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												



For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

CELL LINE VALIDATION SHEET																								
HLA-A*02 SSP subtyping kit ²																								
					Well																			
					33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48				
				Prod. No.:	201907133	201890034	201780235	201780236	201780237	201890038	201780239	201780240	201907141	201890042	201780243	201890044	201780245	201780246	201907147	201780248				
	IHWC cell line ¹		A*	A*																				
1	9001	SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*30:01		-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*02:01	*26:03	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:01	*80:01	-	-	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*02:17		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*02:05		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*24:10	*29:01	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*30:01	*68:02	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*02:17		-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*02:07	*30:01	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*23:01	*24:02	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*02 SSP subtyping kit ²																				
					Well															
				Prod. No.:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
					202020749	201780250	201780251	201890052	201780253	201780254	201907155	201780256	201780257	201780258	201780259	201780260	201780261	201780262	201890063	201780264
	IHWC cell line ¹		A*	A*																
1	9001	SA	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*30:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*02:01	*26:03	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
7	9020	QBL	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*26:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:01	*80:01	-	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*33:03	*74:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*02:17		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*02:01	*34:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*33:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*02:05		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*24:10	*29:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*02:01	*29:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*29:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*30:01	*68:02	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-
31	9019	DUCAF	*30:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*31:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*32:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*02:06	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*02:17		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*01:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*02:07	*30:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*02:07		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*02:06	*02:07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*66:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*23:01	*24:02	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*02:16	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*02:01	*11:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot-specific information

CE
0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-A*02 SSP subtyping kit ²																				
					Prod. No.:	Well														
						81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
						201780281	201907182	202020783	201780284	201780285	201780286	201780287	202020788	201780289	201780290	201780291	201780292	201780293	201780294	201780295
	IHWC cell line ¹		A*	A*																
1	9001	SA	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
3	9011	E4181324	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*30:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*02:01	*26:03		-	-	-	-	-	-	-	-	-	+	-	+	-	-	-
7	9020	QBL	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*26:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
13	9004	JESTHOM	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
14	9071	OLGA	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*24:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*03:01	*80:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*33:03	*74:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
20	9059	SLE005	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
21	9064	AMALA	*02:17			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
22	9056	KOSE	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
23	9124	IHL	*02:01	*34:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
24	9035	JBUSH	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*33:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*02:05			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
27	9191	CH1007	*24:10	*29:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*02:01	*29:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
29	9050	MOU	*29:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*30:01	*68:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
31	9019	DUCAF	*30:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
33	9098	MT14B	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*31:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*32:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*02:06	*11:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
37	9065	HHKB	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*02:17			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
39	9315	CML	*01:01	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*02:07	*30:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
41	9055	H0301	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*02:07			-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
43	9076	T7526	*02:06	*02:07		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
44	9057	TEM	*66:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*23:01	*24:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*03:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*02:16	*03:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
48	9303	TER-ND	*02:01	*11:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-



0197

For *In Vitro* Diagnostic Use
MA123 v02 SSP PI Template
Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

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 15, 20, 24, 26, 29, 30, 32, 38, 40, 42, 44, 46 to 50, 52, 54, 56, 57, 59, 63 to 70, 72 to 89 and 93 to 95 were available.

The specificities of the primers in primer solutions 15, 20, 26, 30, 32, 38, 40, 42, 47, 49, 52, 56, 57, 63, 65 to 67, 69, 72 to 74, 76 to 80, 82 to 88 and 93 to 95 were tested by separately adding one, two or three additional 5'-primers or one or two 3'-primers respectively.

In primer solutions 24, 29, 46, 54, 59, 68, 70, 75, 81 and 89 it was only possible to test the 5'-primers, the 3'-primers were not possible to be tested.

In primer solutions 44, 48 and 64 it was only possible to test the 3'-primers, the 5'-primers were not possible to be tested.

In primer solution 50 neither the 5'-primer nor the 3'-primer were possible to be tested.

In primer solutions 2 to 5, 8, 15, 17, 18, 20, 21, 25, 26, 28, 30, 32 to 40, 42, 43, 45, 47, 49, 55 to 57, 65, 67, 69, 72, 73, 76 to 80, 82 to 88 and 94 one or more of the 3'-primers were not possible to be tested.

In primer solutions 2, 5, 7, 11, 14, 23, 27, 30, 32, 34, 38, 41, 52, 53, 63, 66, 67, 72 to 74, 76 to 78, 80, 82 to 85, 87, 90, 91, 93 and 94 one or more of the 5'-primers were not possible to be tested.

In addition, one or more primers in primer solutions 10, 11, 17, 23, 31, 34, 35, 41, 45 and 91 were tested by separately adding either one or two additional 3'-primers and/or one additional 5'-primer respectively.



0197

For *In Vitro* Diagnostic Use

MA123 v02 SSP PI Template

Date: February 2023, Rev. No: 02

101.412-24/04 – including *Taq* polymerase
101.412-24u/04u – without *Taq* polymerase

Visit www.caredx.com for
“Instructions for Use” (IFU)

Lot No.: **2L5**

Lot-specific information

ADDRESSES:

Manufacturer:

CareDx AB, Franzengatan 5, SE-112 51 Stockholm, Sweden.

Tel: +46-8-508 939 00

Fax: +46-8-717 88 18

E-mail: orders-se@caredx.com

Web page: www.caredx.com

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

Tel: 1-877-653-78171

Fax: 610-344-7989

E-mail: orders-us@caredx.com

Web page: www.caredx.com

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



0197

For *In Vitro* Diagnostic Use

MA123 v02 SSP PI Template

Date: February 2023, Rev. No: 02