Gel Documentation Form and Worksheet

HLA-C\*03 (101.611-12/12u) Lot No: 6E9 Expiry Date: 2019-07-01

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sample ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DNA Conc.(ng/ul):\_\_\_\_\_\_\_\_\_

Test Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tested By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewed By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Interpretation:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Failed lanes*: \_\_\_\_\_\_\_\_\_\_\_\_ *Comments:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

**Gel Picture**

|  |
| --- |
| PHOTO DOCUMENT |







‘ICB’ Internal Control Band,

‘AmpS’ Amplicon Size

**Notes:**

Product sizes are approximate. For detailed information, see the lot-specific Specificity Table and Interpretation Table.

This table is intended as a guide. For interpretation always use the Interpretation Table and/or Specificity Table.

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

Primer mix 7 and 41 may give rise to a lower yield of HLA-specific PCR product than the other HLA-C\*03 primer mixes.

Primer mixes 15, 26, 30, 35 and 43 have a tendency to giving rise to primer oligomer formation.

Primer mixes 20, 28, 32 and 38 may have tendencies of unspecific amplifications.

Primer mix 58 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.





 

















**1**HLA-C alleles listed on the IMGT/HLA web page 2016-July-14, release 3.25.0, [www.ebi.ac.uk/imgt/hla](http://www.ebi.ac.uk/imgt/hla).

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

**3**Primer mix 6: Specific PCR fragment of 90 bp in the C\*03:21, 03:142 and 03:287 and the B\*15:96 alleles. Specific PCR fragment of 215 bp in the C\*03:06:01-03:06:02 alleles.

Primer mix 7: Specific PCR fragment of 110 bp in the C\*03:08, 03:29 and 03:246 and in the C\*01:118, 06:44, 07:01:01:01-07:01:24, 07:01:26-07:01:56, 07:06-07:07, 07:09, 07:16, 07:18-07:20, 07:22, 07:24, 07:26:01-07:26:02, 07:28, 07:30, 07:35-07:36, 07:40, 07:44, 07:52-07:53, 07:55N, 07:57-07:59, 07:65, 07:70-07:71, 07:73, 07:77-07:78:02, 07:81-07:83, 07:86, 07:89, 07:91-07:96:02, 07:98N, 07:103-07:104N, 07:106, 07:108:01-07:108:02, 07:110-07:113, 07:115-07:116, 07:118-07:120, 07:122, 07:124, 07:128-07:129, 07:131:01-07:132, 07:134, 07:140-07:141:02, 07:148, 07:150Q-07:151, 07:153, 07:162, 07:164N-07:166, 07:170, 07:173, 07:176, 07:179-07:180, 07:182, 07:188-07:191N, 07:196-07:197, 07:200-07:201, 07:203-07:207, 07:210, 07:212, 07:214-07:215, 07:219, 07:222-07:224, 07:227N-07:228, 07:230-07:231, 07:235Q-07:237, 07:246:01-07:250, 07:253-07:257:04, 07:263, 07:266-07:269, 07:276-07:282, 07:292-07:293, 07:296-07:301, 07:303-07:304, 07:310-07:311, 07:313, 07:317, 07:330:01-07:332, 07:337, 07:343, 07:353, 07:362, 07:366, 07:369-07:371, 07:377, 07:385-07:387, 07:404, 07:407-07:408, 07:410, 07:412, 07:417, 07:419, 07:421-07:422, 07:424, 07:427, 07:730-07:731, 07:435, 07:437N, 07:440-07:444, 07:448, 07:450, 07:453-07:455, 07:458, 07:460-07:463, 07:468-07:471, 07:475-07:476N, 07:479, 07:481, 07:488, 07:490-07:492, 07:498-07:499, 07:502, 07:506, 07:508, 07:512, 07:514-07:515, 07:517, 07:521-07:522, 07:526-07:527, 14:73, 15:02:10, 15:02:17, 15:99 and 18:05 and in the B\*07:259 alleles. Specific PCR fragment of 185 bp in the C\*03:03:01:01-03:03:25, 03:03:27-03:03:32, 03:11:01-03:11:02, 03:13:01-03:13:02, 03:18:01-03:18:02, 03:20N-03:22Q, 03:30, 03:39, 03:43:01-03:43:02, 03:49-03:50, 03:52-03:53, 03:55-03:56, 03:58-03:59, 03:61-03:62, 03:66-03:69, 03:75-03:76, 03:79, 03:81, 03:83, 03:85-03:86, 03:88, 03:96-03:97, 03:102-03:103, 03:112, 03:116:01-03:116:02, 03:119-03:120, 03:122, 03:124, 03:126-03:127, 03:132-03:133, 03:141-03:142, 03:144, 03:150-03:152, 03:158, 03:160-03:161, 03:165, 03:167-03:168, 03:171, 03:175-03:177, 03:182, 03:185, 03:187-03:189N, 03:192, 03:195-03:196, 03:202-03:207, 03:214, 03:217, 03:220, 03:223, 03:227-03:231, 03:237, 03:241-03:243, 03:251, 03:253-03:254, 03:262, 03:267-03:268, 03:271-03:276, 03:284-03:285, 03:288-03:291, 03:295, 03:304, 03:307-03:308, 03:312, 03:316N, 03:319-03:321 and 03:324 and the C\*01:51, 06:53:01, 07:56:01, 07:79, 14:46:02 and 17:26 and in the B\*07:93, B\*08:39, B\*35:101:02, 35:195, 35:211, B\*38:27, B\*51:76 and B\*54:34 alleles. Specific PCR fragments of 110 bp and 185 bp in the C\*03:31 and in the C\*07:60 and 07:109 alleles.

Primer mix 11: Specific PCR fragment of 145 bp in the C\*03:87:01-03:87:02 and the C\*05:86 alleles. Specific PCR fragment of 230 bp in the C\*03:126 allele. Specific PCR fragment of 415 bp in the C\*03:08, 03:29, 03:31 and 03:246 and the C\*01:118, 04:112, 04:169, 05:36, 06:44, 12:08, 12:81, 14:73, 16:64, 16:70 and 16:87 alleles.

Primer mix 12: Specific PCR fragment of 110 bp in the C\*03:265N and in the B\*44:198N alleles. Specific PCR fragment of 140 bp in the C\*03:214 allele. Specific PCR fragment of 260 bp in the C\*03:03:12, 03:03:15, 03:11:01, 03:18:01, 03:39 and 03:308 and the C\*01:51, 05:55, 06:53:01, 07:56:01, 07:60, 07:79, 07:109, 12:58, 15:12 and 17:26 alleles. Specific PCR fragment of 305 bp in the C\*03:03:29, 03:04:19 and 03:113:01 and the C\*07:10, 07:43, 07:184, 07:196 and 07:367 and in the B\*35:01:38, 35:03:15, 35:08:04, 35:15:02, B\*37:04:02, B\*57:01:18 and B\*58:01:17 alleles. Specific PCR fragment of 590 bp in the C\*07:104N and 12:46N alleles.

Primer mix 13: Specific PCR fragment of 80 bp in the C\*03:02:01-03:02:15, 03:15-03:16, 03:33, 03:36, 03:40:01, 03:40:03-03:40:04, 03:42-03:43:01, 03:60, 03:84, 03:89, 03:95, 03:108, 03:110, 03:121N, 03:132, 03:139, 03:146, 03:169Q, 03:175, 03:194, 03:197-03:201N, 03:216, 03:221-03:222, 03:224N-03:226, 03:238, 03:240, 03:245, 03:248, 03:258, 03:264, 03:279, 03:298-03:301 and 03:315 and the C\*04:54, 04:230, 07:02:32, 07:242, 14:08-14:09, 14:28:01-14:28:02, 15:77 and in the B\*15:78:03 alleles. Specific PCR fragment of 140 bp in the C\*03:17, 03:249 and 03:302 and the C\*04:37, 06:34:02, 14:24:02, 14:26 and 14:55 alleles. Specific PCR fragments of 80 bp and 140 bp in the C\*03:71 and 03:271 and in the C\*01:97, 06:02:08, 12:03:20, 14:02:01:01-14:02:01:02, 14:02:03-14:07N, 14:10-14:16, 14:18-14:24:01, 14:25, 14:27, 14:29-14:53 14:56-14:74 and 16:01:06 alleles.

Primer mix 14: Specific PCR fragment of 70 bp in the C\*03:02:10, 03:03:21 and 03:04:26 and the C\*02:26:01, 05:58:02, 06:70:01, 07:20, 07:390, 08:105, 12:140, 15:02:25 and 15:23 and in the B\*15:315, B\*44:85 and B\*55:30 alleles. Specific PCR fragment of 210 bp in the C\*03:19, 03:102 and 03:307 and in the B\*56:37w alleles.

Primer mix 16: Specific PCR fragment of 120 bp in the C\*03:105 allele. Specific PCR fragment of 150 bp in the C\*03:07, 03:10, 03:15, 03:29, 03:45, 03:163, 03:226, 03:268 and 03:297 and the C\*01:14, 02:02:13, 02:02:29, 04:01:23, 05:01:12, 05:29:02, 06:02:01:01-06:02:01:03, 06:02:03-06:04:02, 06:06-06:10, 06:12-06:76:01, 06:77-06:81, 06:83-06:146, 06:148-06:187, 07:07, 07:09, 07:76:01-07:76:02, 07:315, 07:328, 07:406, 12:04:01, 14:12, 14:49, 15:02:10, 15:02:17, 15:99, 17:01:01:01-17:01:03, 17:01:05-17:21, 17:23-17:33 and 18:01-18:10 and in the B\*15:277, B\*35:222 and B\*42:22 alleles. Specific PCR fragment of 250 bp in the C\*03:218 and 03:252 alleles.

Primer mix 17: Specific PCR fragment of 100 bp in the C\*03:20N and 03:101 allele. Specific PCR fragment of 135 bp in the C\*03:05, 03:25, 03:27, 03:167 and 03:296 alleles.

Primer mix 18: Specific PCR fragment of 165 bp in the C\*03:102 and 03:263 and in the B\*15:96 and B\*56:37 alleles. Specific PCR fragment of 195 bp in the C\*03:83 allele. Specific PCR fragment of 220 bp in the C\*03:23 and 03:318N alleles.

Primer mix 19: Specific PCR fragment of 105 bp in the C\*03:24 and the C\*15:90 alleles. Specific PCR fragment of 250 bp in the C\*03:33, 03:115, 03:236 and the C\*02:114, 04:106 and 08:78 alleles.

Primer mix 20: Specific PCR fragment of 160 bp in the C\*03:25 and 03:155 and the C\*08:95 and in the B\*35:252 and B\*39:114 alleles. Specific PCR fragment of 250 bp in the C\*03:47, 03:252 and 12:126 alleles. Specific PCR fragment of 250 bp and 455 bp in the C\*03:227 alleles.

Primer mix 21: Specific PCR fragment of 210 bp in the C\*03:26 allele. Specific PCR fragment of 240 bp in the C\*03:57:01 and 03:88 alleles.

Primer mix 22: Specific PCR fragment of 200 bp in the C\*03:15, 03:27, 03:38:01-03:38:02, 03:69, 03:130, 03:136, 03:163, 03:237, 03:246, 03:274, 03:277N and 03:297 and the C\*02:12, 02:49, 02:55:01-02:55:02, 02:115, 04:03:01, 04:03:03, 04:06, 04:16, 04:80, 04:107, 04:147, 04:160, 04:171, 04:190, 06:70:01-06:70:02, 06:132:01-06:132:02, 07:20, 07:96:01-07:96:02, 07:127, 07:263, 07:390, 12:140, 15:03, 15:16 and 15:25 alleles. Specific PCR fragment of 255 bp in the C\*03:213 allele.

Primer mix 23: Specific PCR fragment of 90 bp in the C\*03:28, 03:49 and 03:117 and the C\*01:65 and 05:86 alleles. Specific PCR fragment of 260 bp in the C\*03:22Q, 03:90, 03:103, 03:153 and 03:169Q alleles.

Primer mix 24: Specific PCR fragment of 165 bp in the C\*03:120, 03:184:01-03:184:02, 03:200 and 03:229N alleles. Specific PCR fragment of 200 bp in the C\*03:30, 03:65, 03:79 and 03:121N alleles.

Primer mix 25: Specific PCR fragment of 305 bp in the C\*03:32 and 03:45 and the C\*15:62 and in the B\*15:357, B\*35:178, 35:282 and 35:316 alleles. Specific PCR fragment of 355 bp in the C\*03:38:02, 03:69, 03:130, 03:163, 03:246 and 03:274 and the C\*07:367, 12:44, 15:03 and 15:16 alleles. Specific PCR fragments of 305 bp and 355 bp in the C\*03:136 and 03:297 and the C\*04:80, 04:100, 04:110w, 04:178, 06:143, 07:10, 07:43, 07:196 and 15:25 alleles.

Primer mix 26: Specific PCR fragment of 70 bp in the C\*03:34, 03:142, 03:261 and 03:272 alleles. Specific PCR fragment of 105 bp in the C\*03:36, 03:77, 03:187 and 03:296 alleles. Specific PCR fragment of 255 bp in the C\*03:13:01-03:13:02, 03:35, 03:125, 03:176, 03:178, 03:198, 03:267 and 03:292 and the C\*05:86, 07:133, 07:242, 07:330:01 and in the B\*15:96 alleles.

Primer mix 27: Specific PCR fragment of 80 bp in the C\*03:11:01-03:11:02, 03:18:02, 03:37:01-03:37:02, 03:64:01 and 03:301 and the C\*02:08, 02:42, 12:03:23, 15:10:02-15:10:03 and 15:113 and in the B\*58:74 alleles. Specific PCR fragment of 210 bp in the C\*03:208N and 03:323N alleles. Specific PCR fragment of 275 bp in the C\*03:15, 03:32, 03:45, 03:60, 03:136 and 03:297 and the 02:49, 02:75, 02:115, 04:03:01-04:03:03, 04:06, 04:16, 04:80, 04:147, 04:160, 04:171, 06:132:01-06:132:02, 07:96:01-07:96:02, 15:25 and 15:62 alleles. Specific PCR fragment of 80 bp and 275 bp in the C\*06:03:01 and 07:314:02 alleles.

Primer mix 28: Specific PCR fragment of 90 bp in the C\*03:258 allele. Specific PCR fragment of 165 bp in the C\*03:16, 03:41:01-03:41:02, 03:113:01-03:113:02, 03:147, 03:151 and 03:293 and the C\*01:97, 04:01:01:01-04:01:04, 04:01:06, 04:01:08, 04:01:10-04:01:17, 04:01:19-04:01:21, 04:01:23-04:01:25, 04:01:27-04:01:67, 04:01:69-04:01:75, 04:03:01-04:04:01, 04:05-04:20, 04:23-04:49, 04:51-04:63, 04:65-04:76, 04:78-04:94:01, 04:95N-04:98:02, 04:100-04:119, 04:121-04:155, 04:157-04:159, 04:161-04:174, 04:176-04:177, 04:179, 04:180:02-04:200, 04:202-04:211, 04:213-04:222, 04:224-04:233N, 04:235-04:244, 06:02:08, 06:34:02, 07:02:32, 12:03:20, 14:02:01:01-14:02:01:02, 14:02:03-14:02:10, 14:02:12-14:16, 14:18-14:31, 14:33-14:43, 14:45-14:67, 14:69-14:74, 15:77, 16:01:06 and 18:01-18:10 and in the B\*13:13:02, B\*15:01:17 and 15:78:03 alleles.

Primer mix 29: Specific PCR fragment of 140 bp in the C\*03:98 allele. Specific PCR fragment of 170 bp in the C\*03:51, 03:96, 03:161, 03:165 and 03:194 and the C\*04:64:01 alleles. Specific PCR fragment of 285 bp in the C\*03:39 and 03:67 and the C\*06:53:01, 07:56:01, 07:60, 07:79 and 07:109 and in the B\*08:39 alleles.

Primer mix 30: Specific PCR fragment of 150 bp in the C\*03:61 allele. Specific PCR fragment of 175 bp in the C\*03:46, 03:96, 03:194 and 03:221 and the C\*04:64:01 alleles.

Primer mix 31: Specific PCR fragment of 100 bp in the C\*03:59 and 03:123 alleles. Specific PCR fragment of 210 bp in the C\*03:44 allele. Specific PCR fragment of 555 bp in the C\*03:58, 03:86, 03:94, 03:99, 03:209 and 03:302 and the C\*05:85, 05:107, 12:178, 15:37, 15:102 and 16:18 alleles.

Primer mix 32: Specific PCR fragment of 90 bp in the C\*03:58 and 03:189N and the C\*01:03, 01:24, 01:78, 04:37, 05:85 and 07:364 alleles. Specific PCR fragment of 185 bp in the C\*03:48, 03:84, 03:174 and 03:281 alleles.

Primer mix 33: Specific PCR fragment of 110 bp in the C\*03:62 allele. Specific PCR fragment of 180 bp in the C\*03:224N allele. Specific PCR fragment of 310 bp in the C\*03:167 and in the B\*07:93 and B\*08:39 alleles. Specific PCR fragment of 365 bp in the C\*03:43:01-03:43:02, 03:119, 03:132, 03:175 and 03:271 and the C\*07:60, 07:79, 12:58, 14:10 and 14:46:02 and in the B\*35:101:02 alleles.

Primer mix 34: Specific PCR fragment of 130 bp in the C\*03:54 and 03:98 alleles. Specific PCR fragment of 195 bp in the C\*03:192 alleles. Specific PCR fragment of 240 bp in the C\*03:53 and the C\*12:17 alleles.

Primer mix 35: Specific PCR fragment of 70 bp in the C\*03:18:02, 03:64:01 and 03:301 and the C\*02:08, 12:03:23 and 15:10:02-15:10:03 and in the B\*58:74 alleles. Specific PCR fragment of 130 bp in the C\*03:56 and 03:214 and in the B\*44:208 alleles. Specific PCR fragment of 155 bp in the C\*03:229N allele. Specific PCR fragment of 210 bp in the C\*03:79, 03:82 and 03:85 alleles. Specific PCR fragment of 250 bp in the C\*03:244Q allele.

Primer mix 36: Specific PCR fragment of 160 bp in the C\*03:122, 03:206, 03:212 and 03:219 and the C\*04:84, 07:167 and 08:128 alleles. Specific PCR fragment of 240 bp in the C\*03:50 and 03:72 alleles.

Primer mix 38: Specific PCR fragment of 70 bp in the C\*03:184:01-03:184:02 alleles. Specific PCR fragment of 105 bp in the C\*03:52, 03:95 and 03:305 and in the C\*04:43, 04:143 and 04:171 alleles.

Primer mix 39: Specific PCR fragment of 110 bp in the C\*03:36, 03:77, 03:187 and 03:296 and the C\*04:34, 04:122, 04:212 and 14:53 and in the B\*13:13:02 alleles. Specific PCR fragment of 160 bp in the C\*03:63 and 03:145 alleles. Specific PCR fragment of 195 bp in the C\*03:174 allele.

Primer mix 40: Specific PCR fragment of 70 bp in the C\*03:80 and the C\*04:201 and 07:330:02 and in the A\*68:118 and B\*08:115 alleles. Specific PCR fragment of 230 bp in the C\*03:126 allele. Specific PCR fragment of 260 bp in the C\*03:66 allele.

Primer mix 41: Specific PCR fragment of 120 bp in the C\*03:68 allele. Specific PCR fragment of 195 bp in the C\*03:100 allele. Specific PCR fragment of 295 bp in the C\*03:205 and the 04:161w alleles.

Primer mix 42: Specific PCR fragment of 120 bp in the C\*03:78 allele. Specific PCR fragment of 165 bp in the C\*03:201N allele. Specific PCR fragment of 200 bp in the C\*03:70, 03:127, 03:179, 03:192, 03:274 and 03:277N and in the B\*07:234, B\*15:315, B\*18:126 and B\*55:30 alleles.

Primer mix 43: Specific PCR fragment of 230 bp in the C\*03:74, 03:81, 03:137, 03:175, 03:199, 03:223, 03:245 and 03:317 and in the B\*15:96, B\*39:103 and B\*56:37 alleles. Specific PCR fragment of 270 bp in the C\*03:97 and 03:153 alleles.

Primer mix 44: Specific PCR fragment of 70 bp in the C\*03:91:01 allele. Specific PCR fragment of 160 bp in the C\*03:75, 03:120 and 03:229N alleles. Specific PCR fragment of 250 bp in the C\*03:244Q allele.

Primer mix 45: Specific PCR fragment of 150 bp in the C\*03:93, 03:206, 03:212 and the C\*04:84, 07:167 and 08:128 alleles. Specific PCR fragment of 255 bp in the C\*03:213 allele. Specific PCR fragment of 295 bp in the C\*03:76 allele.

Primer mix 46: Specific PCR fragment of 150 bp in the C\*03:155 and the C\*08:95 and in the B\*35:252 and B\*39:114 alleles. Specific PCR fragment of 210 bp in the C\*03:58, 03:86, 03:94 and 03:99 and the C\*01:02:01-01:02:31, 01:02:33-01:03, 01:06-01:07:01, 01:08, 01:10-01:11, 01:13-01:20, 01:23-01:33, 01:38-01:48, 01:51-01:54, 01:56N-01:76, 01:78, 01:80-01:90, 01:92-01:96, 01:98N-01:100, 01:103-01:113, 01:115-01:119, 01:121Q-01:124, 04:37, 05:85, 05:107, 14:45 and 15:102 alleles

Primer mix 47: Specific PCR fragment of 70 bp in the C\*03:14, 03:21, 03:55, 03:92, 03:117 and 03:161 and the C\*01:65, 05:86, 07:133 and 07:330:01 alleles. Specific PCR fragment of 195 bp in the C\*03:109 allele. Specific PCR fragment of 240 bp in the C\*03:57:01, 03:125 and 03:176 alleles.

Primer mix 51: Specific PCR fragment of 120 bp in the C\*03:105 allele. Specific PCR fragment of 235 bp in the C\*03:303 allele.

Primer mix 53: Specific PCR fragment of 240 bp in the C\*03:106 allele. Specific PCR fragment of 315 bp in the C\*03:312 allele.

Primer mix 55: Specific PCR fragment of 260 bp in the C\*03:207 allele. Specific PCR fragment of 470 bp in the C\*03:211:02 and the C\*05:03 alleles.

Primer mix 56: Specific PCR fragment of 155 bp in the C\*03:145 allele. Specific PCR fragment of 265 bp in the C\*03:73 allele.

**4**The C\*03:99 and C\*05:107 alleles give rise to identical amplification patterns with the HLA-C\*03 subtyping kit. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C\*05 subtyping kits.

The C\*03:135, C\*03:154, 03:260, 03:286 and C\*15:43 give rise to identical amplification patterns with the HLA-C\*03 subtyping kit. These alleles can be distinguished by the HLA-C low resolution kit and/or the HLA-C\*15 subtyping kits.

**5**The following HLA-C\*03 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

|  |  |  |  |
| --- | --- | --- | --- |
| **Alleles** | **Primer mix** | **Alleles** | **Primer mix** |
| C\*03:04:19, 03:265N | 12 | C\*03:49, 03:103 | 23 |
| C\*03:06:01-03:06:02, 03:287 | 6 | C\*03:50, 03:122 | 36 |
| C\*03:24, 03:236 | 19 | C\*03:56, 03:85 | 35 |
| C\*03:28, 03:90 | 23 | C\*03:68, 03:205 | 41 |
| C\*03:37:01-03:37:02, 03:208N | 27 | C\*03:70, 03:78, 03:179 | 42 |
| C\*03:44, 03:123, 03:209 | 31 | C\*03:72, 03:219 | 36 |

The HLA-C\*03 subtyping kit cannot distinguish the following silent mutations: the C\*03:02:01-03:02:09 and 03:02:11-03:02:15, the C\*03:03:01:01-03:03:11, 03:03:13-03:03:14, 03:03:16-03:03:20, 03:03:22-03:03:28 and 03:03:30-03:03:32, the C\*03:03:12, 03:03:15 and 03:03:29, the C\*03:04:01:01-03:04:18, 03:04:20-03:04:24, 03:04:27-03:04:51, 03:91:02 and 03:186:01-03:186:02, the C\*03:06:01-03:06:02, the C\*03:13:01-03:13:02, the 03:37:01-03:37:02, the 03:40:01 and 03:40:03-03:40:04, the C\*03:41:01-03:41:02, the C\*03:87:01-03:87:02, the 03:116:01-03:116:02 or the 03:184:01-03:184:02 alleles.

‘w’, might be weakly amplified.

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