

## LOT SPECIFIC INFORMATION

### Product Details

|                            |   |              |                          |              |                          |             |                  |
|----------------------------|---|--------------|--------------------------|--------------|--------------------------|-------------|------------------|
| Product Name:              | Olerup QTYPE 11 HLA Typing Kit  |              |                          |              |                          |             |                  |
| Product Number:            | 201.701-10; 201.701-03  |              |                          |              |                          |             |                  |
| Product Lot:               | <b>E063</b>   |              |                          |              |                          |             |                  |
| Colour Compensation Lot:   | <b>CC63</b>   |              |                          |              |                          |             |                  |
| Number of Tests:           | 10/3  |              |                          |              |                          |             |                  |
| Number of Wells per Test:  | 383 + 1   |              |                          |              |                          |             |                  |
| Number of Tests per Plate: | 1   |              |                          |              |                          |             |                  |
| Expiry Date:               | 2024-05-01  |              |                          |              |                          |             |                  |
| Storage:                   | <table><tr><td>- PCR Plates</td><td>Dark at -15 °C to -25 °C</td></tr><tr><td>- Master mix</td><td>Dark at -15 °C to -25 °C</td></tr><tr><td>- PCR Seals</td><td>Room temperature</td></tr></table> | - PCR Plates | Dark at -15 °C to -25 °C | - Master mix | Dark at -15 °C to -25 °C | - PCR Seals | Room temperature |
| - PCR Plates               | Dark at -15 °C to -25 °C  |              |                          |              |                          |             |                  |
| - Master mix               | Dark at -15 °C to -25 °C  |              |                          |              |                          |             |                  |
| - PCR Seals                | Room temperature  |              |                          |              |                          |             |                  |
| Instructions For Use (IFU) | For further information of using the product, please visit <a href="http://www.caredx.com">www.caredx.com</a> for Instruction for use   |              |                          |              |                          |             |                  |

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### Kit Format

The following components are provided with this kit:

- 10 × PCR plates with pre-aliquoted and dried primer and probe mixes.
- 10 × vials of master mix
- 10 × optically-clear adhesive sealing sheets
- Product insert

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### Lot-Specific Notes

#### Changes from Previous Lot

There are no changes from Olerup QTYPE 11 lot E062. Please note that the positions of mixes that are not listed here may also have changed. Refer to SCORE 6 for the full specificity of each mix.

## Uniquely Identified Alleles

All HLA-A, B, C, DRB1, DRB3, DRB4, DRB5, DQA1, DQB1, DPA1 and DPB1 alleles, recognised by the HLA Nomenclature Committee in October 2023 (IMGT Release 3.54.0), will be detected by this kit.

The CWD allele C\*17:01:01:01 was removed from allele database 3.26 by the IMGT/HLA committee as it is identical to C\*17:01:01:02. All results that were previously C\*17:01:01:01 will now be listed as C\*17:01:01:02, which is now listed as a common allele in SCORE 6.1.

The CWD allele DPA1\*02:02:01 was removed from allele database 3.28 by the IMGT/HLA committee as it is identical to DPA1\*02:07:01:01. All results that were previously DPA1\*02:02:01 will now be listed as DPA1\*02:07:01:01, which is now listed as a common allele in SCORE 6.1.

The CWD allele B\*47:01:01:01 was removed from allele database 3.33 by the IMGT/HLA committee as it is identical to B\*47:01:01:03. All results that were previously B\*47:01:01:01 will now be listed as B\*47:01:01:03. Please note that B\*47:01:01:03 is now listed as a common allele in SCORE 6.1.

The CWD allele B\*78:01:01:01 was removed from allele database 3.40 by the IMGT/HLA committee as it is identical to B\*78:01:01:02. All results that were previously B\*78:01:01:01 will now be listed as B\*78:01:01:02. **Please note that B\*78:01:01:02 is not listed as a common allele in SCORE 6.1.**

The CWD allele DQB1\*02:03:01 was removed from allele database 3.43 by the IMGT/HLA committee as it is identical to DQB1\*02:180. All results that were previously DQB1\*02:03:01 will now be listed as DQB1\*02:180. Please note that DQB1\*02:180 is now listed as a common allele in SCORE 6.1.

The CWD allele DRB1\*15:02:01:01 was removed from allele database 3.44 by the IMGT/HLA committee as it is identical to DRB1\*15:02:01:02. All results that were previously DRB1\*15:02:01:01 will now be listed as DRB1\*15:02:01:02. **Please note that DRB1\*15:02:01:02 is not listed as a common allele in SCORE 6.1.**

## Notes on Specific Reactions

The following reactions are designed to amplify rare alleles. No positive DNA samples were available to test these mixes and they have therefore only been proven to be correctly negative with mismatched alleles.

| Well | Channel | Reaction Specificity  |
|------|---------|---|
| H9   | O560    | DPB1*66:01, 76:01, 125:01, 156:01, 264:01, 287:01, 288:01, 385:01, 470:01, 490:01, 503:01, 514:01, 716:01   |
| M10  | FAM     | B*51:11N  |
| N10  | FAM     | B*15:01:01:02N.   |
| J15  | O560    | DRB1*15:14  |
| N16  | O560    | DRB1*03:08/03:65/03:140, 11:59/11:80/11:83/11:87/11:135/11:142/11:182, DRB3*01:42.  |
| O18  | O560    | DRB4*02:01N.  |
| F19  | O560    | DRB1*03:11  |
| G22  | FAM     | B*07:13/07:247/07:270, 39:121, 67:02:01:01, 67:02:01:02   |
| K24  | O560    | DPB1*38:01, DPB1*1099:01  |
| N24  | O560    | DPB1*78:01.   |
| O24  | O560    | DPB1*59:01, 72:01:01:01-72:01:01:03, 73:01, 95:01, 108:01, 164:01, 179:01, 189:01, 235:01, 306:01, 309:01, 322:01, 355:01, 451:01, 480:01, 508:01, 531:01, 555:01, 574:01, 576:01, 601:01, 620:01, 782:01, DPB1*987:01. |

## Cross Reactive Class I Wells

SCORE 6 will not consider Class I cross reactive non-CWD alleles during the analysis of tests performed with this lot of Olerup QTYPE 11.

The following wells contain cross reactive non-CWD alleles which will not be included as part of the analysis by SCORE 6:

| Well | Channel | Main Locus | Cross Reactive Alleles  |
|------|---------|------------|---|
| N2   | FAM     | A          | C*06:04:02:01, C*06:04:02:02, C*07:01:110, C*07:137:01  |
| O2   | FAM     | A          | B*40:371  |
| P2   | FAM     | A          | B*35:410, B*35:430N, B*52:99  |
| C3   | FAM     | A          | B*15:173, B*15:477, B*44:486, B*50:11, C*03:299   |
| E3   | FAM     | A          | C*16:188  |
| H3   | FAM     | A          | C*12:328  |
| K3   | FAM     | A          | B*15:17:03  |
| P4   | FAM     | A          | C*05:73   |
| B5   | FAM     | A          | C*07:303, C*08:241  |
| K5   | FAM     | B          | C*12:301  |
| L5   | FAM     | B          | C*06:147, C*12:301  |
| M5   | FAM     | B          | C*06:147  |
| C6   | FAM     | B          | C*07:1059   |
| D6   | FAM     | B          | C*04:77, C*05:164, C*08:167   |
| E6   | FAM     | B          | C*06:147, C*12:301  |
| G6   | FAM     | B          | C*12:183, C*14:92, C*07:758   |
| H6   | FAM     | B          | C*03:464  |
| K6   | FAM     | B          | C*03:40:03, C*15:194  |
| O6   | FAM     | B          | C*01:32:01-C*01:32:02, C*06:20, C*12:50, C*14:82, C*16:98:01-C*16:98:02, C*16:102, C*16:110, A*23:128   |
| K7   | FAM     | B          | C*16:85   |
| L7   | FAM     | B          | C*01:124  |
| C8   | FAM     | B          | A*01:201  |
| H8   | FAM     | B          | C*05:184  |
| J8   | FAM     | B          | C*03:464  |
| K8   | FAM     | B          | C*07:626  |
| L8   | FAM     | B          | C*04:188, C*05:70, C*15:51  |
| N8   | FAM     | B          | A*01:201, A*25:66, A*26:68, A*26:100, A*26:200, A*68:56:01-A*68:56:02, C*01:32:01, C*01:32:02, C*02:56, C*04:180:01-C*04:180:02, C*05:217, C*06:20, C*08:123, C*12:50, C*14:82, C*14:92             |
| O8   | FAM     | B          | C*15:117, C*03:609  |
| P8   | FAM     | B          | A*68:233, C*01:73, C*07:414, C*12:301, C*16:151   |
| B9   | FAM     | B          | C*16:85   |
| C9   | FAM     | B          | C*07:546  |
| D9   | FAM     | B          | C*06:147  |
| H9   | FAM     | B          | C*03:433, C*03:514  |
| I9   | FAM     | B          | C*02:60, C*03:386, C*07:850   |
| J9   | FAM     | B          | C*03:464, C*14:92   |
| L9   | FAM     | B          | A*02:147, A*02:555, A*02:743, A*23:52, A*23:129   |
| A10  | FAM     | B          | C*16:85   |
| F10  | FAM     | B          | C*03:384, C*06:207, C*01:30, C*03:51, C*03:161, C*05:216:01:01-C*05:216:01:02, C*08:51, C*08:114 C*08:243, C*12:87, C*14:76, C*15:39, C*15:130, C*15:195, A*33:231                                  |
| K10  | FAM     | B          | C*12:183, C*14:92, C*07:758, C*03:464   |
| K10  | O560    | B          | C*12:168  |
| E11  | FAM     | C          | B*56:37, B*35:537, B*51:238   |
| F11  | FAM     | C          | B*13:13:02, B*35:578  |
| H11  | FAM     | C          | B*14:02:30  |
| I11  | FAM     | B          | A*01:201, A*03:100, A*25:66, A*26:68, A*26:100, A*26:200, A*29:42, A*30:64, A*32:158, A*33:04, A*33:33, A*68:56:01, A*68:56:02, C*03:102, C*03:263:01, C*03:263:02, C*03:263:03, C*03:514, C*15:126 |
| M11  | FAM     | C          | B*15:510, B*35:475, B*46:84   |
| P11  | FAM     | C          | B*39:09:03, 39:136, B*18:01:48  |
| A12  | FAM     | C          | B*08:01:36, B*15:436, B*55:01:25, B*35:570  |
| B12  | FAM     | B          | C*05:12, C*05:151, C*08:39, C*08:165, C*08:177, C*08:213  |
| D12  | FAM     | A          | C*06:187  |
| E12  | FAM     | C          | B*07:246, B*07:327, B*35:578, B*38:114  |
| I12  | FAM     | C          | B*07:463  |

| Well | Channel | Main Locus | Cross Reactive Alleles   |
|------|---------|------------|--|
| P12  | FAM     | C          | B*46:77, B*46:86   |
| A13  | FAM     | C          | B*35:570, B*39:201   |
| G13  | FAM     | C          | B*15:510, B*35:475, B*46:84  |
| H13  | FAM     | C          | B*40:367   |
| L13  | FAM     | C          | B*35:291, B*44:226, B*51:281   |
| J14  | FAM     | C          | B*46:77, B*35:570  |
| M14  | FAM     | B          | C*02:23  |
| O14  | FAM     | C          | B*13:31, 13:41, B*13:145   |
| B15  | FAM     | C          | A*02:736, A*23:128, A*24:64, B*07:239, B*08:232, B*14:23, B*14:33, B*14:88, B*15:510, B*18:44:01- B*18:44:02, B*35:475, B*40:243, B*44:440, B*46:84, B*57:11, B*58:02:01:02- B*58:02:01:03, B*58:02:02, B*58:02:03, B*58:07, B*58:25, B*58:38, B*58:43, B*58:46, B*58:60, B*58:104, B*58:132 |
| O15  | FAM     | A          | B*55:93, C*03:350, B*38:87   |
| J16  | FAM     | B          | C*01:35, C*01:107, C*03:03:32, C*03:04:27, C*03:04:59, C*03:87:01, C*03:220, C*03:263:01- C*03:263:03, C*01:244  |
| B20  | FAM     | B          | C*15:15, C*15:195  |
| K20  | FAM     | B          | C*07:1059  |
| M21  | FAM     | B          | A*02:147, C*01:101, C*01:102, C*03:245   |
| B22  | FAM     | B          | C*01:73  |
| B23  | FAM     | B          | C*07:758, C*12:183, C*14:92  |
| H23  | FAM     | B          | C*07:1011  |
| I23  | FAM     | B          | C*01:32:02, C*14:92  |
| J23  | FAM     | B          | C*07:850   |
| K23  | FAM     | B          | C*03:102, C*03:263:01, C*03:263:02, C*03:514, C*03:263:03, C*07:81, C*07:168, C*07:450:01, C*07:450:02, C*07:959, C*08:139   |
| B24  | FAM     | C          | B*35:570   |
| D24  | FAM     | B          | C*15:195   |
| F24  | FAM     | B          | C*07:546   |
| J24  | FAM     | B          | C*03:161, C*07:516, C*07:521:01-07:521:02, C*15:39, C*15:130, C*08:243   |
| K24  | FAM     | B          | C*03:102   |
| M24  | FAM     | B          | C*16:85  |

The following wells contain cross reactive CWD alleles which will be included as part of the analysis by SCORE 6:

| Well | Channel | Main Locus | Cross Reactive Alleles                |
|------|---------|------------|---------------------------------------|
| C9   | FAM     | B          | C*07:46                               |
| P12  | FAM     | C          | B*07:13, B*67:02:01:01, B*67:02:01:02 |
| B15  | FAM     | C          | B*58:02:01:01, B*58:06                |
| F24  | FAM     | B          | C*07:46                               |

### DRB1/3/4/5 Wells

DRB1/3/4/5 are analysed as a group, and some reaction mixes amplify alleles from both DRB1 and DRB3/4/5 in combination. SCORE 6 will not consider some non-CWD alleles during the analysis and tests performed with this lot of Olerup QTYPE 11.

The following wells contain reaction mixes that amplify non-CWD alleles which will not be included as part of the analysis by SCORE 6:

| Well | Channel | Main Locus | Alleles that will NOT be included in analysis  |
|------|---------|------------|--|
| D1   | O560    | DRB1       | DRB3*01:14   |
| E1   | O560    | DRB345     | DRB1*03:17, DRB1*03:27, DRB1*03:35, DRB1*03:81, DRB1*03:167, DRB1*03:188, DRB1*04:140, DRB1*11:136, DRB1*14:141, DRB1*14:257 |
| N12  | O560    | DRB1       | DRB3*01:82, DRB3*03:62   |
| M15  | O560    | DRB1       | DRB3*03:01:05  |
| O15  | O560    | DRB1       | DRB5*02:31   |
| A16  | O560    | DRB1       | DRB4*01:03:26  |
| C16  | O560    | DRB1       | DRB3*02:04   |
| E16  | O560    | DRB1       | DRB3*01:71   |
| I16  | O560    | DRB1       | DRB5*01:13, DRB5*01:41   |
| L16  | O560    | DRB1       | DRB3*01:42, DRB3*02:18, DRB5*01:13, DRB5*01:41   |
| M16  | O560    | DRB1       | DRB3*02:18, DRB5*01:13, DRB5*01:41   |
| N16  | O560    | DRB1       | DRB3*01:42   |
| B17  | O560    | DRB1       | DRB3*02:160  |
| O17  | O560    | DRB1       | DRB3*01:14   |
| H18  | O560    | DRB345     | DRB1*03:42, DRB1*03:87, DRB1*11:288, DRB1*12:57, DRB1*14:247   |
| I18  | O560    | DRB345     | DRB1*04:20, DRB1*11:30, DRB1*13:67, DRB1*13:195, DRB1*14:46, DRB1*14:141, DRB1*14:257  |
| K18  | O560    | DRB345     | DRB1*14:141  |
| L18  | O560    | DRB345     | DRB1*12:57, DRB1*13:195, DRB1*14:247   |
| P18  | O560    | DRB345     | DRB1*04:245, DRB1*04:352, DRB1*04:357, DRB1*10:19  |
| E19  | O560    | DRB1       | DRB3*03:56, DRB3*03:59   |
| G19  | O560    | DRB1       | DRB3*01:23, DRB3*01:46, DRB3*02:146  |
| L19  | O560    | DRB1       | DRB3*01:14   |
| M19  | O560    | DRB1       | DRB5*01:73   |
| O19  | O560    | DRB1       | DRB5*01:22:01, DRB5*01:64, DRB5*01:110, DRB5*01:127N   |
| P19  | O560    | DRB1       | DRB3*01:14   |
| K19  | O560    | DRB1       | DRB3*02:111  |

**Please note that the information in this section only applies to SCORE 6.2.**

## Notes on Bw4/Bw6 Assignment

SCORE 6 assigns the Bw4 and Bw6 status of HLA-B and HLA-A alleles based on the reactivity of mixes that target the Bw4 and Bw6 nucleotide motifs. These mixes will identify the presence or absence of these nucleotide motifs in most Class I alleles. Since there is some redundancy in the nucleotide motifs that code for the Bw amino acid motifs, a subset of alleles will not be detected by these mixes. The following table shows the plate positions of these mixes, and the alleles that are not amplified within their Bw mix (CWD 2.0 alleles shown in **bold**).

| Bw Status | Main Locus | Well     | Channel | Exceptions   |
|-----------|------------|----------|---------|--|
| Bw4       | A          | A4       | FAM     | A*01:95, A*01:289, A*24:02:96, A*24:02:108, A*24:243, A*24:294Q  |
| Bw4       | B          | K7       | FAM     | <b>B*52:04</b><br>B*13:02:07, B*13:87, B*27:05:37, B*27:07:03, B*38:01:15, B*38:35, B*38:81, B*44:172, B*44:191, B*44:255, B*51:01:34, B*51:01:54, B*51:28, B*51:67, B*51:178N, B*51:257, B*51:266, B*51:290 B*52:01:25, B*52:87, B*53:01:19, B*53:45, B*53:58, B*57:34, B*57:35, B*57:117<br>B*58:01:24, B*58:01:25, B*58:25, B*58:54 and B*58:68 |
| Bw6       | B          | C6<br>P8 | FAM     | <b>B*07:13, B*40:22N, B*67:02</b><br>B*08:97, B*08:101, B*08:193, B*14:02:05, B*14:34, B*15:01:28, B*15:04:03, B*15:434, B*18:01:24, B*35:01:05, B*35:02:09, B*35:152, B*39:105, B*39:115, B*40:127, B*41:55, B*46:48, B*48:36, B*54:30, B*54:35, B*78:01:02   |

SCORE 6 also checks the Bw status of HLA-B and HLA-A alleles based on the amino acid sequences at codons 77 and 80-83, in accordance with the following table<sup>1</sup>:

| Bw Status | Amino Acid Position |     |     |     |     |
|-----------|---------------------|-----|-----|-----|-----|
|           | 77                  | 80  | 81  | 82  | 83  |
| Bw4       | Asn                 | Ile | Ala | Leu | Arg |
| Bw4       | Asn                 | Thr | Ala | Leu | Arg |
| Bw4       | Ser                 | Ile | Ala | Leu | Arg |
| Bw4       | Ser                 | Thr | Leu | Leu | Arg |
| Bw4       | Asp                 | Thr | Leu | Leu | Arg |
| Bw6       | Ser                 | Asn | Leu | Arg | Gly |
| Bw6       | Gly                 | Asn | Leu | Arg | Gly |

In cases where there is a discrepancy between the Bw mix result and the expected Bw result based on the amino acid sequence for the detected allele(s) (for example, if one of the exceptions in the above table is found, or a null allele is amplified by the Bw mix), SCORE 6 will inform the user that the Bw status has been assigned based on the amino acid sequence.

<sup>1</sup>The Bw4 public epitope of HLA-B molecules confers reactivity with natural killer cell clones that express NKB1, a putative HLA receptor  
Gumperz JE, Litwin V, Phillips JH, Lanier LL, Parham P.1995 Mar 1;181(3):1133-44 <https://www.ncbi.nlm.nih.gov/pubmed/7532677>

## Plate Layout

|   | 1  | 2  | 3  | 4  | 5  | 6  | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  |
|---|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A | 1  | 17 | 33 | 49 | 65 | 81 | 97  | 113 | 129 | 145 | 161 | 177 | 193 | 209 | 225 | 241 | 257 | 273 | 289 | 305 | 321 | 337 | 353 | 369 |
| B | 2  | 18 | 34 | 50 | 66 | 82 | 98  | 114 | 130 | 146 | 162 | 178 | 194 | 210 | 226 | 242 | 258 | 274 | 290 | 306 | 322 | 338 | 354 | 370 |
| C | 3  | 19 | 35 | 51 | 67 | 83 | 99  | 115 | 131 | 147 | 163 | 179 | 195 | 211 | 227 | 243 | 259 | 275 | 291 | 307 | 323 | 339 | 355 | 371 |
| D | 4  | 20 | 36 | 52 | 68 | 84 | 100 | 116 | 132 | 148 | 164 | 180 | 196 | 212 | 228 | 244 | 260 | 276 | 292 | 308 | 324 | 340 | 356 | 372 |
| E | 5  | 21 | 37 | 53 | 69 | 85 | 101 | 117 | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 | 261 | 277 | 293 | 309 | 325 | 341 | 357 | 373 |
| F | 6  | 22 | 38 | 54 | 70 | 86 | 102 | 118 | 134 | 150 | 166 | 182 | 198 | 214 | 230 | 246 | 262 | 278 | 294 | 310 | 326 | 342 | 358 | 374 |
| G | 7  | 23 | 39 | 55 | 71 | 87 | 103 | 119 | 135 | 151 | 167 | 183 | 199 | 215 | 231 | 247 | 263 | 279 | 295 | 311 | 327 | 343 | 359 | 375 |
| H | 8  | 24 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 | 264 | 280 | 296 | 312 | 328 | 344 | 360 | 376 |
| I | 9  | 25 | 41 | 57 | 73 | 89 | 105 | 121 | 137 | 153 | 169 | 185 | 201 | 217 | 233 | 249 | 265 | 281 | 297 | 313 | 329 | 345 | 361 | 377 |
| J | 10 | 26 | 42 | 58 | 74 | 90 | 106 | 122 | 138 | 154 | 170 | 186 | 202 | 218 | 234 | 250 | 266 | 282 | 298 | 314 | 330 | 346 | 362 | 378 |
| K | 11 | 27 | 43 | 59 | 75 | 91 | 107 | 123 | 139 | 155 | 171 | 187 | 203 | 219 | 235 | 251 | 267 | 283 | 299 | 315 | 331 | 347 | 363 | 379 |
| L | 12 | 28 | 44 | 60 | 76 | 92 | 108 | 124 | 140 | 156 | 172 | 188 | 204 | 220 | 236 | 252 | 268 | 284 | 300 | 316 | 332 | 348 | 364 | 380 |
| M | 13 | 29 | 45 | 61 | 77 | 93 | 109 | 125 | 141 | 157 | 173 | 189 | 205 | 221 | 237 | 253 | 269 | 285 | 301 | 317 | 333 | 349 | 365 | 381 |
| N | 14 | 30 | 46 | 62 | 78 | 94 | 110 | 126 | 142 | 158 | 174 | 190 | 206 | 222 | 238 | 254 | 270 | 286 | 302 | 318 | 334 | 350 | 366 | 382 |
| O | 15 | 31 | 47 | 63 | 79 | 95 | 111 | 127 | 143 | 159 | 175 | 191 | 207 | 223 | 239 | 255 | 271 | 287 | 303 | 319 | 335 | 351 | 367 | 383 |
| P | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 | 256 | 272 | 288 | 304 | 320 | 336 | 352 | 368 | NTC |

The plate layout shows the co-ordinates of each well (row A-P, column 1-24). The reaction number is written in black in each well. The No Template Control (NTC) well is shown in white text on a black background. The double border marks a single test.

The NTC is designed to amplify the same region as the internal control amplification that is present in each well (i.e. a conserved region of a human growth hormone gene), and will therefore be positive if it is contaminated with either human genomic DNA or Olerup QTYPE amplicon. The NTC reaction occurs in the O560 channel.

## Instructions for the Preparation of the Reaction Mixture

- Set up the no template control well (in accordance with the instructions for use) before continuing to prepare the reaction mixture. Briefly, the total volume in the NTC should be 10 µl, consisting of 2 µl of master mix and 8 µl water.
- This kit contains mixer tubes, which should be used for preparing the reaction mixtures. Refer to the following table for instructions of how much of each component to add to the mixer tubes, depending on the concentration of the sample DNA:

| Component  | Volume (µl)           |                        |                        |                        |
|------------|-----------------------|------------------------|------------------------|------------------------|
|            | For 5 ng/µl DNA stock | For 10 ng/µl DNA stock | For 30 ng/µl DNA stock | For 50 ng/µl DNA stock |
| Master mix | 950                   | 950                    | 950                    | 950                    |
| DNA Sample | 950                   | 475                    | 158                    | 95                     |
| Water      | 2850                  | 3325                   | 3642                   | 3705                   |

(If calculating different volumes, it is important to ensure that each well contains 2 µl master mix and a total amount of 10 ng DNA. The total well volume should be made up to 10 µl.)

- Briefly vortex the reaction mixture.
- Refer to the Olerup QTYPE Instructions for Use for further information on the test setup.

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