

| Well No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DR                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| DRB1 allele <sup>1,3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ser <sup>2</sup>      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *01:01:01-01:02:08, 01:04-01:38, 01:40N-01:41, 01:43-01:60                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DR1, Null, -          | 1 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *01:03, 01:39N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DR103/DR1, Null       |   | 2 |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *01:42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                     | 1 | 2 |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *03:01:01:01-03:01:05, 03:01:07-03:01:08, 03:01:10-03:01:22, 03:04:01-03:06, 03:09, 03:11:01-03:16, 03:18-03:20, 03:22-03:23, 03:25-03:26, 03:28, 03:30-03:31, 03:33-03:34, 03:36-03:37, 03:43-03:45, 03:47-03:48, 03:50-03:52, 03:54-03:63, 03:66-03:68N, 03:70-03:73, 03:75, 03:77-03:86, 03:89, 03:91, 03:93                                                                                                                                                                                                                        | DR17, DR3, Null, -    |   |   |   |   | 5 | 6 |   |   |   |    |    |    |    |    |    |    | 17 |    |    |    |    |    |    |    |
| *03:01:06, 03:01:09, 03:46, 03:64, 03:92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DR17, -               |   |   |   |   | 5 | 6 |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *03:02:01-03:03, 03:27, 03:29, 03:38, 03:53, 03:74, 03:88, 03:90                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DR18, DR3, -          |   |   |   |   | 5 |   | 7 |   |   |    |    |    |    |    |    |    | 17 |    |    |    |    |    |    |    |
| *03:07, 03:17, 03:21, 03:24, 03:32, 03:35, 03:39-03:41, 03:49                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DR3, -                |   |   |   |   | 5 |   |   |   |   |    |    |    |    |    |    |    | 17 |    |    |    |    |    |    |    |
| *03:08, 03:65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DR3, -                |   |   |   |   | 5 | 6 |   |   |   | 11 |    | 13 |    |    |    |    |    |    |    |    |    |    |    |    |
| *03:10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DR3                   |   |   |   |   | 5 | 6 |   |   |   |    |    |    |    |    |    |    |    | 19 | 20 |    |    |    |    |    |
| *03:42, 03:69, 03:87                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -                     |   |   |   |   | 5 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *03:76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                     |   |   |   |   |   | 6 |   |   |   |    | 12 |    |    | 15 |    | 17 |    |    |    |    |    |    |    |    |
| *04:01:01-04:05:11, 04:05:13-04:61, 04:63-04:68, 04:70-04:72:02, 04:74-04:104, 04:106-04:121, 04:123-04:145, 04:147-04:164                                                                                                                                                                                                                                                                                                                                                                                                             | DR4, DR4/DR3, Null, - |   |   |   |   |   |   |   | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *04:62, 04:69, 04:73, 04:105:01-04:105:02, 04:122, 04:146                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DR4, -                |   |   |   |   |   |   |   | 8 |   |    |    |    |    |    |    |    | 18 |    |    |    |    |    |    |    |
| *07:01:01:01-07:01:07, 07:03-07:28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DR7, Null, -          |   |   |   |   |   |   |   |   | 9 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *08:01:01-08:02:04, 08:04:01-08:07, 08:11, 08:16-08:17, 08:22, 08:24, 08:26, 08:28, 08:39, 08:42-08:44, 08:50, 08:52, 08:54                                                                                                                                                                                                                                                                                                                                                                                                            | DR8, -                |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    | 16 |    |    |    |    |    |    |    |    |
| *08:03:02-08:03:03, 08:10, 08:12-08:15, 08:18-08:19, 08:23, 08:25, 08:27, 08:29-08:30:03, 08:33-08:34, 08:36:01, 08:37-08:38, 08:45-08:49, 08:51                                                                                                                                                                                                                                                                                                                                                                                       | DR8, -                |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *08:08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DR8                   |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    | 16 |    | 18 |    |    |    |    |    |    |
| *08:09                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DR8                   |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    | 16 |    |    |    | 20 |    |    |    |    |
| *08:20, 13:18, 13:47, 13:55, 13:158, 13:164 <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DR13, -               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    | 15 | 16 | 17 |    | 20 |    |    |    |    |
| *08:21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DR8                   |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    | 15 | 16 |    |    | 20 |    |    |    |    |
| *08:31, 08:41, 11:67 <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DR8/DR11, -           |   |   |   |   |   |   |   |   |   | 10 |    |    | 13 |    |    | 16 |    |    |    |    |    |    |    |    |
| *08:32, 08:53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -                     |   |   |   |   |   |   |   |   |   | 10 |    |    |    | 14 |    |    |    |    | 20 |    |    |    |    |    |
| *08:35, 08:36:02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -                     |   |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    |    |    |    | 20 |    |    |    |    |    |
| *08:40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                     |   |   |   |   | 6 |   |   |   |   | 10 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *09:01:02-09:01:05, 09:01:07-09:02:02, 09:04-09:20, 09:22                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DR9, -                |   |   |   |   |   |   |   |   |   |    | 11 |    |    |    |    |    |    | 19 |    |    |    |    |    |    |
| *09:01:06, 09:03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DR9                   |   |   |   |   |   |   |   |   |   |    | 11 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *10:01:01-10:06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DR10, -               |   |   |   |   |   |   |   |   |   |    |    | 12 |    |    |    |    |    |    |    |    |    |    |    |    |
| *11:01:01-11:01:17, 11:01:20, 11:04:01-11:04:11, 11:06:01-11:06:03, 11:09-11:10:02, 11:12:01-11:12:02, 11:15, 11:24, 11:27:01-11:30, 11:32-11:33, 11:35, 11:37:01-11:39, 11:43-11:44, 11:46:01-11:47, 11:49:01-11:51, 11:54:01-11:54:02, 11:56, 11:58:01-11:58:02, 11:60-11:62, 11:66, 11:72, 11:74:01-11:75, 11:77-11:78, 11:81, 11:84:01-11:84:03, 11:88, 11:90-11:92, 11:94-11:95, 11:97, 11:99-11:102:02, 11:106, 11:108-11:117, 11:120-11:121, 11:123, 11:126, 11:128-11:129, 11:133-11:134, 11:137, 11:140-11:141, 11:144-11:147 | DR11, -               |   |   |   |   |   |   |   |   |   |    |    |    | 13 |    | 15 | 16 |    |    |    |    |    |    |    |    |
| Well No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DR                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Well No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DR                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| *11:01:18-11:01:19, 11:08:01-11:08:02, 11:18-11:19:03, 11:42, 11:57, 11:130                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DR11, -               |   |   |   |   |   |   |   |   |   |    |    |    | 13 |    | 15 |    |    |    |    |    |    |    |    |    |

Negative Control



|                                                                                                                                                                                                                                                                       |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| *13:129                                                                                                                                                                                                                                                               | -                             |   |   |   |   | 6 |   |   |   |    |    | 12 |    |    |    | 16 | 17 |    |    |    |    |    |    |    |    |
| *13:144                                                                                                                                                                                                                                                               | -                             |   |   |   |   | 6 |   |   |   |    |    |    |    |    |    | 15 | 16 | 17 |    |    | 20 |    |    |    |    |
| *13:146                                                                                                                                                                                                                                                               | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | 16 | 17 |    |    | 20 |    |    |    |    |
| *14:01:01-14:01:02, 14:01:04, 14:04, 14:07:01-14:07:02, 14:10, 14:54:01, 14:57                                                                                                                                                                                        | DR14, DR1404/DR14, DR4/DR6, - |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | 17 | 18 | 19 | 20 |    |    |    |    |
| *14:01:03, 14:05:01-14:05:04, 14:14, 14:23:01, 14:23:03-14:23:04, 14:36, 14:43-14:45, 14:54:02, 14:56, 14:59, 14:64, 14:91, 14:96, 14:100, 14:103, 14:123, 14:127:01-14:127:02, 14:134                                                                                | DR14, -                       |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | 17 |    | 19 | 20 |    |    |    |    |
| *14:02, 14:06:01-14:06:02, 14:09, 14:13, 14:17, 14:20, 14:29-14:30, 14:33, 14:41, 14:47-14:48, 14:51, 14:80, 14:83, 14:94, 14:106, 14:108, 14:121                                                                                                                     | DR14, DR6, -                  |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    |    |    | 17 |    | 19 |    |    |    |    |    |
| *14:03:01-14:03:02, 14:12:01-14:12:02, 14:40, 14:63, 14:67, 14:77-14:78, 14:85, 14:102, 14:115, 14:135                                                                                                                                                                | DR1403/DR14, DR6, -           |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    | 15 |    | 17 |    |    | 20 |    |    |    |    |
| *14:08, 14:23:02, 14:34, 14:72, 14:92N, 14:97, 14:126, 14:130, 14:133                                                                                                                                                                                                 | DR14, Null, -                 |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | ?  |    | 19 | 20 |    |    |    |    |
| *14:11                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   |    | 10 |    |    |    |    |    |    | 17 |    | 19 | 20 |    |    |    |    |
| *14:15                                                                                                                                                                                                                                                                | DR8                           |   |   |   |   |   |   |   |   |    | 10 |    |    |    |    |    |    | 16 | ?  |    | 20 |    |    |    |    |
| *14:16                                                                                                                                                                                                                                                                | DR6                           |   |   |   |   | 6 |   |   |   |    |    |    |    |    |    | 15 | 16 | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:18, 14:81                                                                                                                                                                                                                                                         | DR14, -                       |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    |    |    | 17 |    | 19 | 20 |    |    |    |    |
| *14:19, 14:21, 14:109                                                                                                                                                                                                                                                 | DR14, -                       |   |   |   |   | 6 | 7 |   |   |    |    |    |    |    |    | 15 |    | 17 |    | w  |    |    |    |    |    |
| *14:22, 14:105                                                                                                                                                                                                                                                        | DR14, -                       |   |   |   |   |   |   |   |   |    |    |    |    |    |    | 15 | 16 | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:24                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    |    | 16 | 17 |    |    |    |    |    |    |    |
| *14:25, 14:53, 14:128                                                                                                                                                                                                                                                 | DR6, DR13/14, -               |   |   |   |   |   |   |   |   |    |    |    |    |    |    | 15 | 16 | ?  | 18 |    | 20 |    |    |    |    |
| *14:26, 14:28, 14:31, 14:32:03, 14:35, 14:38-14:39, 14:55, 14:60-14:62, 14:70-14:71, 14:75-14:76, 14:79, 14:86-14:88, 14:90, 14:99, 14:101, 14:104, 14:107, 14:110-14:114, 14:117-14:118, 14:120, 14:122, 14:124-14:125, 14:129, 14:131, 14:138-14:140, 14:142-14:143 | DR14, -                       |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:27                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    | 15 | 16 | 17 |    |    | 20 |    |    |    |    |
| *14:32:01-14:32:02                                                                                                                                                                                                                                                    | DR14                          |   |   |   |   |   | w |   |   |    |    |    |    |    |    |    |    | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:37                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | 16 | 17 | 18 |    |    |    |    |    |    |
| *14:42, 14:136                                                                                                                                                                                                                                                        | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | 17 |    |    | 20 |    |    |    |    |
| *14:46                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    | 19 |    |    |    |    |
| *14:49, 14:119                                                                                                                                                                                                                                                        | DR14, -                       |   |   |   |   |   | 7 |   |   |    |    |    |    |    |    |    |    | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:50                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   | 9  |    |    |    |    |    |    |    | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:52                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | ?  |    | 19 |    |    |    |    |    |
| *14:58                                                                                                                                                                                                                                                                | DR14                          |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | ?  | 18 |    | 20 |    |    |    |    |
| *14:65                                                                                                                                                                                                                                                                | DR6                           |   |   |   |   |   | w |   |   |    |    |    |    |    |    |    |    | 17 |    | 19 | 20 |    |    |    |    |
| *14:68, 14:93                                                                                                                                                                                                                                                         | DR14, -                       |   |   |   |   |   |   |   |   | 10 |    |    |    |    |    |    |    | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:69                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    | 15 |    | ?  | 18 |    | 20 |    |    |    |    |
| *14:73                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | 16 | ?  | 18 | 19 | 20 |    |    |    |    |
| *14:74                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | 15 | ?  | 18 | 19 | 20 |    |    |    |    |
| Well No.                                                                                                                                                                                                                                                              | DR                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Well No.                                                                                                                                                                                                                                                              | DR                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| *14:82                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   | 6 |   |   |    |    |    |    |    |    |    |    | 17 | 18 | 19 | 20 |    |    |    |    |
| *14:89                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   |   | 7 |   |    |    |    |    |    |    |    |    | 17 |    |    | 20 |    |    |    |    |
| *14:95                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   | 6 |   |   |    |    |    |    |    |    |    |    | 17 |    | 19 | 20 |    |    |    |    |
| *14:98                                                                                                                                                                                                                                                                | -                             |   |   |   |   |   |   | 7 |   |    |    |    |    |    |    | 15 |    | 17 |    |    |    |    |    |    |    |
| *14:132                                                                                                                                                                                                                                                               | -                             |   |   |   |   |   | 6 |   |   |    |    |    |    |    |    |    |    | ?  |    | 19 | 20 |    |    |    |    |
| *14:137N                                                                                                                                                                                                                                                              | Null                          |   |   |   |   |   | 6 |   |   |    |    |    |    |    |    | 15 |    | 17 | 18 | 19 | 20 |    |    |    |    |
| *14:141                                                                                                                                                                                                                                                               | -                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | 17 |    |    |    | 21 |    |    |    |
| *15:01:01:01-15:20, 15:22-15:24, 15:26, 15:28-15:33, 15:35-15:65, 15:67-15:100                                                                                                                                                                                        | DR15, DR2, Null, -            |   |   | 3 |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *15:21                                                                                                                                                                                                                                                                | DR2                           |   |   | 3 |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    | w  |    |    |    |    |
| *15:25                                                                                                                                                                                                                                                                | -                             |   |   | 3 |   | 5 |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *15:27, 15:34, 15:66                                                                                                                                                                                                                                                  | -                             |   |   | 3 |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    | 19 |    |    |    |    |    |
| *16:01:01-16:03, 16:05:01-16:05:02, 16:07-16:17, 16:19-16:24                                                                                                                                                                                                          | DR16, Null, -                 |   |   |   | 4 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| *16:04, 16:18                                                                                                                                                                                                                                                         | DR16, -                       |   |   |   | 4 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    | w  |    |    |    |    |

Negative Control

Negative Control

|                                                                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| DRB3*01:01:02:01-01:15, DRB3*02:01-02:26, DRB3*02:28-02:29N, DRB3*03:01:01-03:03 | DR52, Null, - |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | 21 |    |    |
| DRB3*02:27                                                                       | -             |   |   |   |   |   |   |   |   |   |    |    |    |    | 15 |    |    |    |    |    |    |    | 21 |    |    |
| DRB4*01:01:01:01-01:03:01:01, DRB4*01:03:01:03-01:08                             | DR53, -       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    | 22 |    |
| DRB4*01:03:01:02N                                                                | Null          |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    | 18 |    |    |    |    |    | 22 |    |
| DRB5*01:01:01:01:14, DRB5*02:02-02:06                                            | DR51, Null, - |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 23 |
| Well No.                                                                         | DR            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |