

Olerup SSP[®] DRB1*14

Product number:	101.117-12/03 – including <i>Taq</i> pol.
Lot number:	43G
Expiry date:	2011-October-01
Number of tests:	12 tests – Product No. 101.117-12 3 tests – Product No. 101.117-03
Number of wells per test:	45
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. 43G.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP[®] DRB1*14 LOT

The DRB1*14 specificity and interpretation tables have been updated for the DRB1 alleles reported since the previous *Olerup SSP[®] DRB1*14* lot (Lot No. 17F) was made.

Three wells have been added to the DRB1*14 kit,
wells **43 to 45**.

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

Well	5'-primer	3'-primer	rationale
3	-	Exchanged	Changed 3'-primer to decrease primer dimer tendencies.
8	Moved	Moved	Primer pair moved to well 24.
9	Modified	-	Modified 5'-primer to increase signal strength.
20	-	-	Exchanged positive control primer pair.
24	Added	Added	Primer pair from well 8.
26	Modified	-	Modified 5'-primer to increase signal strength.
43	New	New	New primer pair for the *1482 allele.
44	New	New	New primer pair for the *1483 allele.
45	New	New	New primer pair for the *1486 allele.

PRODUCT DESCRIPTION

DRB1*14 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the DRB1*1401 to DRB1*1486 alleles.

PLATE LAYOUT

Each test consists of 45 PCR reactions in a 48 well cut PCR plate. Wells 46 to 48 are empty.

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	empty	empty	empty

The 48 well cut PCR plate is marked with 'DRB1*14' in silver/gray ink. Well No. 1 is marked with the Lot No. '43G'.

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

The PCR plates are covered with a PCR-compatible foil.

Please note: When removing each 48 well PCR plate, make sure that the remaining plates stay covered. Use a scalpel or a similar instrument to carefully cut the foil between the plates.

INTERPRETATION

The interpretation of DRB1*14 PCR-SSP subtypings will be influenced by six DRB1*01 alleles, all DRB1*03 alleles, seven DRB1*04 alleles, most DRB1*08 alleles, most DRB1*11 alleles, all DRB1*12 alleles, all DRB1*13 alleles, six DRB1*15 alleles and the DRB1*1608 allele, when present on the other haplotype. In addition, the DRB3*0216 allele will be amplified by primer mix 25.

UNIQUELY IDENTIFIED ALLELES

All the phenotypically different DRB1*14 alleles, i.e. **DRB1*1401 to DRB1*1486**, recognized by the HLA Nomenclature Committee in July 2009¹ will give rise to unique amplification patterns by the primers in the DRB1*14 subtyping kit.

The DRB1*14 subtyping kit cannot distinguish the DRB1*140101 to 140103 alleles or the DRB1*140301 and 140302 alleles or the DRB1*140501 and 140502 alleles or the DRB1*140701 and 140702 alleles, the DRB1*142301 and 142302 alleles or the DRB1*143201 and 143202 alleles.

¹DRB alleles listed on the IMGT/HLA web page 2009-July-17, release 2.26.0, www.ebi.ac.uk/imgt/hla.

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RESOLUTION IN HOMO- AND HETEROZYGOTES

The 85 phenotypically different DRB1*14 alleles give rise to 87 different amplification patterns, that can be combined in 3 828 homozygous and heterozygous combinations. 700 of these genotypes do not give rise to unique amplification patterns. (The different lengths of the specific PCR products in lanes 9, 11, 14, 20, 21, 24 to 26, 29 and 32 were not considered in these calculations.)

+++++--	-----	-+-----	----+--	+-----	-----	1438,1448 = 1447,1460
+++++--	-----	-+-----	----+--	+-----	-----	1402,1438 = 1438,1447 = 1447,1454
+++++--	-----	-+-----	----+--	+-----	-----	1402,1460 = 1448,1454 = 1448,1460
+++----	-----	+-----	-----	+-----	-----	1421,1454 = 1421,1470
+++----	-----	-+-----	-----	+-----	-----	1433,1454 = 1433,1470
+++----	-----	-+-----	-----	+-----	-----	1417,1454 = 1417,1470
+++----	-----	-+-----	-----	+-----	-----	1454,1480 = 1470,1480
+++----	-----	-+-----	-----	+-----	-----	1426,1440 = 1426,1477 = 1454,1477
+++----	-----	-+-----	-----	+-----	-----	1441,1455 = 1455,1477
+++----	-----	-+-----	-----	+-----	-----	1403,1455 = 1440,1455
+++----	-----	-+-----	-----	+-----	-----	1405,1449 = 1449,1456
+++----	-----	-+-----	-----	+-----	-----	140503,1449 = 1449,1462
+++----	-----	-+-----	-----	+-----	-----	1408,1449 = 1423,1449
+++----	-----	-+-----	-----	+-----	-----	1426,1441 = 1441,1454
+++----	-----	-+-----	-----	+-----	-----	1414,1449 = 144401,1449
+++----	-----	-+-----	-----	+-----	-----	1407,1449 = 144402,1449
+++----	-----	-+-----	-----	+-----	-----	1454,1478 = 1462,1478
+++----	-----	-+-----	-----	+-----	-----	1412,1455 = 1455,1481
+++----	-----	-+-----	-----	+-----	-----	1418,1432 = 1418,1474
+++----	-----	-+-----	-----	+-----	-----	1432,1481 = 1474,1481
+++----	-----	-+-----	-----	+-----	-----	1420,1470 = 1470,1481
+++----	-----	-+-----	-----	+-----	-----	1407,1455 = 144402,1455
+++----	-----	-+-----	-----	+-----	-----	1405,1422 = 1422,1456
+++----	-----	-+-----	-----	+-----	-----	140503,1422 = 1422,1462
+++----	-----	-+-----	-----	+-----	-----	1405,1453 = 1453,1456
+++----	-----	-+-----	-----	+-----	-----	1405,1425 = 1425,1456
+++----	-----	-+-----	-----	+-----	-----	1405,1469 = 1456,1469
+++----	-----	-+-----	-----	+-----	-----	1405,1407 = 1407,1456 = 144401,1462
+++----	-----	-+-----	-----	+-----	-----	140503,1407 = 1407,1462 = 144402,1462
+++----	-----	-+-----	-----	+-----	-----	1422,1439 = 1425,1439
+++----	-----	-+-----	-----	+-----	-----	1407,1439 = 1439,144402
+++----	-----	-+-----	-----	+-----	-----	1408,1453 = 1425,1472
+++----	-----	-+-----	-----	+-----	-----	1408,1422 = 1422,1423
+++----	-----	-+-----	-----	+-----	-----	1425,1435 = 1453,1454
+++----	-----	-+-----	-----	+-----	-----	1422,1458 = 1425,1454
+++----	-----	-+-----	-----	+-----	-----	1432,1442 = 1442,1474
+++----	-----	-+-----	-----	+-----	-----	1432,1436 = 1436,1474
+++----	-----	-+-----	-----	+-----	-----	1407,1434 = 1432,144401 = 144401,1474
+++----	-----	-+-----	-----	+-----	-----	1414,1432 = 1414,1474
+++----	-----	-+-----	-----	+-----	-----	1407,1416 = 1416,144402
+++----	-----	-+-----	-----	+-----	-----	1407,1432 = 1407,1474 = 1432,144402 = 144402,1474
+++----	-----	-+-----	-----	+-----	-----	1407,1472 = 1435,144401
+++----	-----	-+-----	-----	+-----	-----	1414,1426 = 1426,1436 = 1436,1454
+++----	-----	-+-----	-----	+-----	-----	1407,1408 = 1407,1423 = 144401,1454
+++----	-----	-+-----	-----	+-----	-----	1407,1435 = 1435,144402
+++----	-----	-+-----	-----	+-----	-----	1407,1426 = 1426,144402
+++----	-----	-+-----	-----	+-----	-----	1401,1407 = 1401,144402

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+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1438 = 1438,144402
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1460 = 144402,1460
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1470 = 144402,1470
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1475 = 144402,1475
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1482 = 144402,1482
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1486 = 144402,1486
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1454 = 144402,1454
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1476 = 1407,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1414,1422 = 1422,144401
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1422 = 1422,144402
+++++--	-----	-+-----	+--+-----	+-----	-----	1414,1453 = 144401,1453
+++++--	-----	-+-----	+--+-----	+-----	-----	1414,1425 = 1425,144401
+++++--	-----	-+-----	+--+-----	+-----	-----	1414,1469 = 144401,1469
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1414 = 1407,144401
+++++--	-----	-+-----	+--+-----	+-----	-----	1407,1407 = 1407,144402
+++++--	-----	-+-----	+--+-----	+-----	-----	1455,1476 = 1455,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	140503,1455 = 1454,1484 =
						1455,1462 = 1462,1484
+++++--	-----	-+-----	+--+-----	+-----	-----	1410,1455 = 1455,1457
+++++--	-----	-+-----	+--+-----	+-----	-----	1416,1455 = 1432,1455 =
						1455,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1408,1455 = 1423,1455
+++++--	-----	-+-----	+--+-----	+-----	-----	1462,1476 = 1462,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1439,1476 = 1439,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1431,1454 = 1431,1458
+++++--	-----	-+-----	+--+-----	+-----	-----	1404,1432 = 1431,1432
+++++--	-----	-+-----	+--+-----	+-----	-----	1432,1476 = 1432,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1473 = 1458,1473
+++++--	-----	-+-----	+--+-----	+-----	-----	1428,1454 = 1428,1458
+++++--	-----	-+-----	+--+-----	+-----	-----	1426,1476 = 1426,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1468 = 1458,1468
+++++--	-----	-+-----	+--+-----	+-----	-----	1401,1476 = 1401,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1404,1438 = 1438,1450 =
						1450,1454 = 1450,1458
+++++--	-----	-+-----	+--+-----	+-----	-----	1438,1476 = 1438,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1460,1476 = 1460,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1471 = 1458,1471
+++++--	-----	-+-----	+--+-----	+-----	-----	1404,1454 = 1404,1458
+++++--	-----	-+-----	+--+-----	+-----	-----	1475,1476 = 1475,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1476,1482 = 1479,1482
+++++--	-----	-+-----	+--+-----	+-----	-----	1476,1486 = 1479,1486
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1476 = 1454,1479 =
						1458,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1435,1476 = 1435,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	1470,1476 = 1470,1479
+++++--	-----	-+-----	+--+-----	+-----	-----	140503,1439 = 1439,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	1432,1443 = 1443,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1432,1456 = 1456,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1432,1445 = 1445,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1405,1432 = 1405,1474 =
						1434,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	140503,1416 = 1416,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	140503,1432 = 140503,1474 =
						1432,1462 = 1462,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1432,1465 = 1465,1474
+++++--	-----	-+-----	+--+-----	+-----	-----	1443,1454 = 1443,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	1405,1435 = 1462,1472
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1456 = 1456,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	1401,1405 = 1401,1445 =
						1445,1454 = 1445,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	1405,1454 = 1405,1462 =
						1408,1462 = 1423,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	1454,1465 = 1462,1465
+++++--	-----	-+-----	+--+-----	+-----	-----	1437,1454 = 1437,1462
+++++--	-----	-+-----	+--+-----	+-----	-----	140503,1435 = 1435,1462

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+++++--	+---+--	-+---++	-----	+-----	-----	140503,1426 = 1426,1462
+++++--	+---+--	-+---++	-----	+-----	-----	1401,140503 = 1401,1462
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1438 = 1438,1462
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1460 = 1460,1462
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1470 = 1462,1470
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1475 = 1462,1475
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1482 = 1462,1482
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1486 = 1462,1486
+++++--	+---+--	-+---++	-----	+-----	-----	140503,1454 = 140503,1462 =
						1454,1462 = 1462,1462
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1439 = 1439,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1439 = 1423,1439
+++++--	+---+--	-+---++	-----	+-----	-----	1410,1439 = 1410,1458 =
						1439,1439 = 1439,1454 =
						1439,1458
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1416 = 1416,1423
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1464 = 1464,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1472 = 1434,1435 =
						1472,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1459 = 1459,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1432 = 1408,1474 =
						1423,1432 = 1423,1474 =
						1434,1454
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1458 = 1458,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1435 = 1435,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1426,1432 = 1426,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1401,1432 = 1401,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1438 = 1438,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1460 = 1460,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1470 = 1470,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1475 = 1474,1475
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1482 = 1474,1482
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1486 = 1474,1486
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1454 = 1454,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1434 = 1434,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1432,1432 = 1432,1474
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1464 = 1464,1470
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1435 = 1423,1435 =
						1454,1472
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1426 = 1423,1426
+++++--	+---+--	-+---++	-----	+-----	-----	1401,1408 = 1401,1423
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1438 = 1423,1438
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1460 = 1423,1460
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1459 = 1459,1470 =
						1459,1486
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1470 = 1423,1470
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1475 = 1423,1475
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1482 = 1423,1482
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1486 = 1423,1486
+++++--	+---+--	-+---++	-----	+-----	-----	1408,1454 = 1423,1454
+++++--	+---+--	-+---++	-----	+-----	-----	1426,1426 = 1426,1454
+++++--	+---+--	-+---++	-----	+-----	-----	1401,1401 = 1401,1454
+++++--	+---+--	-+---++	-----	+-----	-----	1438,1438 = 1438,1454
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1460 = 1460,1460
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1475 = 1475,1475
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1482 = 1482,1482
+++++--	+---+--	-+---++	-----	+-----	-----	1454,1486 = 1486,1486
+++++--	+---+--	-+---++	-----	+-----	-----	1405,1419 = 1419,1443
+++++--	+---+--	-+---++	-----	+-----	-----	1402,1464 = 1418,1430 =
						1451,1464
+++++--	+---+--	-+---++	-----	+-----	-----	1402,1459 = 1451,1459
+++++--	+---+--	-+---++	-----	+-----	-----	1402,1418 = 1418,1451
+++++--	+---+--	-+---++	-----	+-----	-----	1406,1464 = 1417,1418 =
						1418,1433
+++++--	+---+--	-+---++	-----	+-----	-----	1409,1464 = 1414,1433

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+++++--	-----+	-+-----	-----+	-----	-----	1414,1417 = 1442,1480
+++++--	-----+	-+-----	-----+	-----+	-----	1430,1464 = 1433,1442
+++++--	-----+	-+-----	-----+	-----	-----	1409,1442 = 1414,1430
+++++--	+-----+	+-----+	-----+	-----	-----	1405,1421 = 1421,1443
+++++--	-----+	-+-----	-----+	-----+	-----+	1417,1459 = 1433,1459
+++++--	-----+	-+-----	-----+	-----+	-----	1423,1433 = 1464,1480
+++++--	-----+	-+-----	-----+	-----+	-----	1417,1464 = 1433,1464
+++++--	-----+	-+-----	-----	-----	-----	1420,1436 = 1423,1441
+++++--	-----+	-+-----	+-----+	-----+	-----	1418,144401 = 1418,144402
+++++--	-----+	-+-----	-----	-----	-----	1414,1477 = 1436,1440 = 1436,1477
+++++--	-----+	-+-----	-----	-----	-----	1414,1441 = 1436,1441
+++++--	+-----+	-+-----	-----+	-----	-----	1405,1478 = 1423,1478
+++++--	+-----+	-+-----	-----+	-----+	-----	1405,1418 = 140503,1418
+++++--	-----+	-+-----	-----+	-----+	-----	1418,1464 = 1420,1464 = 1464,1481
+++++--	-----+	-+-----	-----+	-----+	-----+	1418,1459 = 1420,1459 = 1459,1481
+++++--	-----+	-----	-----+	-----+	-----	1418,1418 = 1418,1420 = 1418,1481
+++++--	-----	-----	-----+	-----	-----	1420,1481 = 1481,1481
+++++--	+-----+	+-----	+-----	-----	-----	1443,144401 = 1443,144402
+++++--	+-----+	-+-----	-----	-----	-----	1405,1442 = 140503,1442
+++++--	+-----+	-+-----	-----	-----	-----	1405,1436 = 140503,1436
+++++--	+-----+	-+-----	+-----	-----	-----	144401,1445 = 144402,1445
+++++--	+-----+	-+-----	+-----	-----	-----	1405,144401 = 1405,144402 = 140503,144401 = 1414,1456 = 144401,1456 = 144402,1456
+++++--	+-----+	-+-----	-----	-----	-----	1405,1414 = 140503,1414
+++++--	+-----+	-+-----	+-----	+-----	-----	1434,144401 = 1434,144402
+++++--	-----+	-+-----	+-----	+-----	-----	144401,1472 = 144402,1472
+++++--	-----+	-+-----	+-----	+-----	-----	1408,144401 = 1408,144402
+++++--	-----+	-+-----	+-----	+-----	-----	144401,1464 = 144402,1464
+++++--	-----+	-+-----	+-----	+-----	-----+	144401,1459 = 144402,1459
+++++--	-----+	-+-----	+-----	-----	-----	1423,144401 = 1423,144402
+++++--	-----+	-+-----	+-----	+-----	-----	1414,1468 = 144401,1468
+++++--	-----+	-+-----	+-----	+-----	-----	1411,144401 = 1411,144402
+++++--	-----+	-+-----	+-----	-----	-----	1442,144401 = 1442,144402
+++++--	-----+	-+-----	+-----	-----	-----	1436,144401 = 1436,144402
+++++--	-----+	-+-----	-----	-----	-----	1414,1436 = 1436,1436
+++++--	-----+	-+-----	+-----	-----	-----	1414,144401 = 1414,144402 = 144401,144401 = 144401,144402
+++++--	+-----+	-+-----	-----	-----	-----	1405,1484 = 1423,1484
+++++--	+-----+	-+-----	+-----	+-----	-----	1405,1468 = 1456,1468
+++++--	-----+	-+-----	-----	+++-----	-----	1404,1434 = 1431,1434
+++++--	-----+	-+-----	-----	+-----	+-----	1434,1476 = 1434,1479
+++++--	-----+	-+-----	-----	+-----	+-----	1408,1476 = 1408,1479
+++++--	-----+	-+-----	-----	+-----	+-----	1472,1476 = 1472,1479
+++++--	+-----+	-+-----	-----	+-----	-----	1405,1434 = 140503,1434
+++++--	+-----+	-+-----	-----	+-----	-----	1405,1411 = 140503,1411
+++++--	+-----+	-+-----	-----	+-----	-----	1405,1472 = 140503,1472
+++++--	+-----+	-+-----	-----	+-----	-----	1405,1408 = 140503,1408
+++++--	+-----+	+-----	-----	-----	-----	1405,1443 = 140503,1443 = 1423,1443 = 1443,1443
+++++--	+-----+	-+-----	-----	-----	-----	1405,1465 = 1423,1465
+++++--	+-----+	-+-----	-----	-----	-----	1405,1437 = 1423,1437
+++++--	+-----+	-+-----	-----	-----	-----	1405,1464 = 140503,1464
+++++--	+-----+	-+-----	+-----	-----	-----	1405,1456 = 140503,1456 = 1423,1456 = 1456,1456
+++++--	+-----+	-+-----	+-----	-----	-----	1405,1445 = 140503,1445 = 1423,1445 = 1445,1445
+++++--	+-----+	-+-----	-----	-----	-----	1405,1459 = 140503,1459
+++++--	+-----+	-+-----	-----	-----	-----	1405,1405 = 1405,140503 = 1405,1423 = 140503,1423

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+-----+ -+-----+ -+-----+ ----- +-----+ -----	1408,1434 = 1423,1434
+-----+ -+-----+ -+-----+ ----- +-----+ -----	1408,1408 = 1408,1423
+-----+ -+-----+ -+-----+ -----+ -+-----+ -----	1423,1459 = 1459,1459
-+-----+ -+-----+ -+-----+ ----- +-----+ -----	1416,1477 = 1474,1477
-+-----+ -+-----+ -+-----+ ----- +-----+ -----	1403,1416 = 1416,1440 =
	1440,1474
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1403,1422 = 1422,1427
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1403,1453 = 1427,1453
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1403,1425 = 1425,1427 =
	1427,1469
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1449 = 1431,1449
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -+-----	1449,1476 = 1449,1479
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1428 = 1425,1428
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1450 = 1425,1450
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1471 = 1425,1471
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1422 = 1404,1425 =
	1422,1431 = 1425,1431
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1468 = 1425,1468
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -+-----	1422,1476 = 1422,1479 =
	1425,1479
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1473 = 1425,1473 =
	1469,1473
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1453 = 1431,1453
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1469 = 1431,1469
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1422,1425 = 1422,1469
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1425,1453 = 1453,1469
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1425,1425 = 1425,1469
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1416,1484 = 1474,1484
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1416 = 1416,1431
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -+-----	1416,1476 = 1416,1479
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1474 = 1431,1474
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -+-----	1474,1476 = 1474,1479
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1410,1416 = 1416,1457 =
	1457,1474
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1415,1416 = 1415,1474
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1416,1416 = 1416,1474
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1478 = 1413,1478
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1403,1417 = 1412,1430
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1403,1480 = 1409,1412
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1406,1485 = 1412,1413
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1412 = 1403,1406
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1419,1433 = 1421,1451
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1433 = 1417,1451 =
	1433,1451
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1413,1421 = 1421,1424
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1421 = 1417,1419 =
	1419,1421
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1417 = 1406,1430
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1480 = 1406,1409
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1463 = 1413,1463 =
	1413,1467
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1485 = 1403,1413 =
	1413,1485
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1450 = 1404,1447 =
	1447,1450
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1451 = 1451,1451
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1413,1419 = 1419,1424
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1419 = 1419,1419
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1413 = 1413,1413 =
	1413,1424
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1447 = 1447,1447
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1402,1448 = 1448,1448
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1404,1429 = 1406,1428 =
	1428,1429
-+-----+ -+-----+ -+-----+ +-----+ +-----+ -----	1406,1452 = 1420,1452

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---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1433 = 1420,1433
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1429 = 1420,1429 =
						1429,1429
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1421 = 1420,1421
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1417 = 1417,1420
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1480 = 1420,1480
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1483 = 1420,1483 =
						1483,1483
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1406,1406 = 1406,1420
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1409,1417 = 1430,1480
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1417,1433 = 1433,1433
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1417,1421 = 1421,1421
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1452 = 1431,1452
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1441,1484 = 1477,1484
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1484 = 1440,1484
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1478 = 1424,1478 =
						1463,1478 = 1467,1478 =
						1478,1485
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1473 = 1427,1473
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1457 = 1440,1457
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1427 = 1427,1427
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1415 = 1415,1440
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1477 = 1440,1441 =
						1440,1477 = 1441,1477 =
						1477,1477
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1440 = 1440,1440
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1463 = 1424,1463 =
						1463,1463 = 1463,1467 =
						1463,1485 = 1467,1485
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1467 = 1467,1467
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1403,1485 = 1424,1485 =
						1485,1485
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1412,1478 = 1420,1478 =
						1478,1478
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1412,1412 = 1412,1420
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1410,1476 = 1410,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1411 = 1411,1431
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1431,1476 = 1431,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1431 = 1431,1431 =
						1431,1461
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1473,1476 = 1473,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1461,1473 = 1473,1473
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1428,1476 = 1428,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1428 = 1428,1428 =
						1428,1461
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1468,1476 = 1468,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1461,1468 = 1468,1468
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1450,1476 = 1450,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1450 = 1450,1450 =
						1450,1461
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1471,1476 = 1471,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1471 = 1461,1471 =
						1471,1471
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1476 = 1404,1479
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1404,1404 = 1404,1461
---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	---+---+---	1461,1476 = 1461,1479 =
						1476,1479 = 1479,1479

1401 = 140101-140103
1403 = 140301-140302
1405 = 140501-140502
1407 = 140701-140702
1423 = 142301-142302
1432 = 143201-143202



SPECIFICITY TABLE

DRB1*14 SSP subtyping

Specificities and sizes of the PCR products of the 45 primer mixes used for DRB1*14 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of contr. band ²	Amplified DRB1*14 alleles ³	Other amplified DRB alleles ^{3,4}
1	210 bp	515 bp	*140101-140103, 140501-140503, 140701-1408, 1414, 1418, 142301, 142302, 1426, 143201, 143202, 1434-1436, 1438, 1439, 1442-1445, 1454, 1455 ^w , 1456, 1458-1460, 1462, 1464, 1465, 1470, 1472, 1475, 1481, 1482, 1486	*111301, 111302, 1117, 1152
2⁸	175 bp	430 bp	*140101-140103, 140701, 140702, 1416, 1422, 1425, 1426, 143201, 143202, 1435, 1438, 1439, 1449, 1453- 1455, 1458, 1460, 1462, 1469, 1470, 1474, 1475, 1482, 1486	*0310, 1343, 1345
3⁵⁻⁷	140 bp	515 bp	*1402, 1406, 1409, 1413, 1417, 1419, 1421, 1429, 1430, 1433, 1446-1448, 1451, 1452, 1480, 1483	*1310, 1385
4^{5,7}	85 bp	430 bp	*1402-140302, 1406, 1412, 1413, 1418- 1420, 1424, 1427, 1429, 1440, 1441, 1447-1449, 1451, 1463, 1467, 1477, 1478, 1481, 1483, 1485	*030201-0303, 0327, 0329, 0338, 1315, 1319, 1326, 1353, 1357, 1385, 1386

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5	260 bp	430 bp	*1402-140302, 140701, 140702, 1409, 1413, 1414, 1419, 1422, 1424, 1425, 1427, 1430, 1436, 1440-1442, 144401, 144402, 1447-1449, 1451, 1453, 1463, 1467, 1469, 1477, 1485	*030201, 030202, 030501- 030503, 0309, 0314, 0317, 0327, 0329, 0335, 0338, 0340, 0341, 110101-110108, 110801-111202, 111401-1115, 111901-1120, 1123, 1124, 1126-1129, 1131-1133, 1137, 1139, 1145, 1149, 1151, 1153, 1161, 1162, 1164, 1166, 1168, 1169, 1172, 1173, 130201- 130302, 130501, 130502, 130701, 130702, 1312-131403, 1321, 1323, 1325, 1326, 1329- 1331, 133301, 1334, 1336- 1339, 1341, 1345-1347, 1349- 135002, 1355, 1356, 1360, 1362, 1363, 1365, 1366, 1373, 1374, 1382, 1385, 1386, 1388
6	260 bp	515 bp	*140101-140103, 140501-1406, 1408, 1412, 1416-1418, 1420, 1421, 142301, 142302, 1426, 1429, 143201-1435, 1437- 1439, 1443, 1445, 1454-1456, 1458- 1460, 1462, 1464, 1465, 1470, 1472, 1474, 1475, 1478, 1480-1484, 1486	*03010101-030106, 0303, 0304, 0306-0308, 0310- 031302, 0315, 0316, 0318- 0326, 0328, 0330-0334, 0336, 0337, 0339, 0343, 0820, 110201-110404, 110601-1107, 111301, 111302, 1116-1118, 1121, 1125, 1134-1136, 1138, 1140-1144, 1146-1148, 1150, 1152, 115401-1160, 1163, 116501, 116502, 1170, 130101-130103, 1304, 1306, 1308-131102, 1315, 1318- 1320, 1322, 1324, 1327, 1328, 1332, 1335, 1340, 1342-1344, 1348, 1351-1354, 1357-1359, 1361, 1364, 1368-1372, 1375- 1381, 1383, 1384, 1387
7	225 bp	430 bp	*140301, 140302, 1412, 1427, 1440, 1455, 1463, 1467, 1477, 1478, 1484, 1485	*0820, 1123, 1125, 1145, 1155, 1164, 1313, 1318, 1347, 1355
8	170 bp	430 bp	*1404, 1428, 1431, 1450, 1461, 1468, 1471, 1473, 1476, 1479	*0808, 0811 ^w
9^{5,9}	130 bp, 250 bp	430 bp	*140501-140503, 1437, 1443, 1445,	*0312, 0410-0412, 0467, 0806, 0810, 0812, 0822, 1304, 1332,

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			1456, 1462, 1465, 1478, 1484	1348, 1358, 1372, 1375, 1381, 1512
10⁶	175 bp	430 bp	*1410, 1439, 1457	*0462, 0469
11^{5,10}	85 bp ,170 bp, 215 bp	430 bp	*1411, 1416, 1422, 1425, 1431-143202, 1434, 1449, 1452, 1453, 1469, 1474	*0114, 0462, 0805, 0818, 0824, 0825, 0831, 1167, 120101-1219, 1317, 1343, 1345
12⁷	225 bp	515 bp	*140101-140103, 140501-140503, 140701-1408, 1414, 1418, 142301, 142302, 1426, 1433, 1435, 1436, 1438, 1439, 1442-1445, 1451, 1454, 1456, 1458-1460, 1462, 1464, 1470, 1472, 1475, 1482, 1486	*0311, 0317, 0324, 0327, 0335, 1117, 1152-115402, 1376
13^{5,6}	115 bp	430 bp	*140101-140103, 1404, 140701-1408, 1410, 1416, 1422, 1426, 1428, 1431- 143202, 1434, 1435, 1438, 1439, 1449, 1450, 1454, 1455, 1460-1462, 1468, 1470-1475, 1479, 1482, 1486	*0310, 1152, 1343
14^{5,11}	60 bp, 130 bp	515 bp	*1422, 1425, 1427, 1453, 1473	*0808, 1109, 112801, 112802, 1158, 130501, 130502, 1318, 1326, 1342, 135001, 135002, 1608
15	185 bp	430 bp	*1428, 1429	*0320, 1205, 1214, 1215
16⁵	105 bp	430 bp	*140501, 140502, 1408, 1411, 1414, 1418, 142301, 142302, 1434, 1436, 1442-144401, 1445, 1456, 1459, 1464, 1472	*010201-010205, 110105, 110403, 110602, 111301, 111302, 1117, 1152, 115401, 1204, 1209, 130103, 1376
17	220 bp	430 bp	*1419, 1421, 1443	*1173, 130301, 130302, 1310, 133301, 1337, 1366, 1381, 1385, 1388
18⁵	85 bp	430 bp	*140101-140103, 140501-140503, 140701-1409, 1414, 1416, 1417, 1421-	*03010101-030106, 0304- 0326, 0328, 0330-0337, 0339- 0341, 0343, 0820, 110101- 110404, 110601-1121, 1123-

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			142302, 1425, 1426, 1430, 143201-1439, 1442-1445, 1453-1456, 1458-1460, 1462, 1464, 1465, 1469, 1472, 1474, 1475, 1480, 1482, 1484, 1486	1129, 1131-1166, 1168-1170, 1173, 130101-131403, 1316, 1318, 1320-1325, 1327-1352, 1354-1356, 1358-1366, 1368-1384, 1387, 1388
19⁵	145 bp	430 bp	*1415, 1416, 1440, 1455, 1457, 1477, 1484	*0809, 0821, 0835, 1308, 1319, 1357, 1364, 1372, 1376, 1383
20^{5,6,8,12}	60 bp, 110 bp, 170 bp, 215 bp	515 bp	*1404, 1415, 1425, 1428, 1431, 1439, 1450, 1453, 1458, 1463, 1467-1469, 1471, 1473, 1476, 1478, 1479	*0412, 0418, 080101-080404, 0806-0817, 0819-0823, 0826-0828, 0830, 0832-0836, 1123, 1125, 1145, 1155, 1164, 1167, 1313, 1345, 1347, 1355, 1521
21¹³	170 bp, 215 bp	515 bp	*1413, 1424, 1437, 1463, 1465, 1478, 1485	*0312, 1169, 130301-1304, 1309, 1312, 1313, 1321, 1330, 1332, 133301, 1338, 1348, 1349, 1355, 1358, 1365, 1366, 1375, 1381, 1388
22⁵	145 bp	430 bp	*140101-140302, 140501-1409, 1412-1414, 1416, 1418-1420, 1422-1427, 1429, 143201, 143202, 1434, 1436-1441, 1443-1445, 1447-1449, 1451, 1454-1456, 1458-1460, 1462, 1463, 1467, 1469, 1470, 1474, 1475, 1477, 1478, 1480-1486	*030201-0303, 0306, 0317, 0326, 0327, 0331, 0335, 0338, 0341, 0820, 1117, 1137, 1141, 1148, 1150, 1152, 1156, 130301, 130302, 130701-1308, 1312, 1313, 1319, 1326, 1332, 133301, 1336-1338, 1340, 1347-1349, 1353, 1355, 1358, 1360, 1365, 1370, 1372, 1376, 1381, 1384, 1385, 1388
23⁵	145 bp	430 bp	*1417, 1421, 1430, 1433, 1435, 1442, 1453, 1464, 1465, 1472	*03010101-030106, 0304-030503, 0307-0315, 0318-0325, 0328-0330, 0332-0334, 0336, 0337, 0339, 0340, 0343, 110101-110106, 110108-110404, 110601-1116, 1118-1121, 1123-1129, 1131-1136, 1138-1140, 1142-1147, 1149, 1151, 1153-1155, 1157-1166, 1168-1170, 1172, 1173, 130101-130203, 1304-1306, 1309-131102, 131401-1316, 1318, 1320-1325, 1327-1331,

				1334, 1339, 1341-1346, 135001-1352, 1354, 1356, 1357, 1359, 1361-1364, 1366, 1368, 1369, 1371, 1373-1375, 1377-1379, 1382, 1383, 1386, 1387
24 ^{5,14}	75 bp, 115 bp, 135 bp	430 bp	*1426, 1436, 1441, 1477	*0318, 0343, 1334, 1364
25 ^{5,15}	120 bp, 210 bp, 250 bp	430 bp	*140701, 140702, 1422, 1425, 144401, 144402, 1449, 1453, 1456, 1468, 1469	*0114, 0335, 0462, 0469, 0808, 0815, 1345, DRB3*0216
26 ^{6,8,16}	190 bp, 250 bp	515 bp	*140101-140103, 1445	
27 ⁶	220 bp	515 bp	*1446	
28 ⁸	230 bp	430 bp	*1438, 1447, 1450	*030102, 030202, 030503, 031302, 0317, 0324, 0327, 0335, 112701, 1361
29 ^{5,8,17}	135 bp, 175 bp	515 bp	*1448, 1460	*0338, 1331, 1346, 1354, 1377
30	200 bp	430 bp	*1406, 1412, 1417, 1418, 1421, 1429, 1433, 1452, 1459, 1464, 1470, 1478, 1480, 1481, 1483	*03010101-030106, 0303, 0306-0308, 0310-031302, 0315, 0316, 0318-0320, 0322- 0324, 0326, 0328, 0332-0334, 0336, 0337, 0339, 0342, 1116, 1140, 1158, 1159, 130101- 130103, 1306, 1309, 1310, 1315, 1318, 1320, 1327, 1328, 1332, 1335, 1340, 1342, 1343, 1351, 1353, 1359, 1361, 1369, 1371, 1377-1380, 1387, 15030101, 15030102, 1523, 1532
31 ⁵	80 bp	515 bp	*1435, 1453, 1472	*0310, 1131, 1343, 1345
32 ^{5,8,18}	100 bp, 145 bp	430 bp	*1413, 1419, 1421, 1463, 1478, 1485	*0312, 1310, 1332, 1365, 1385
33	175 bp	430 bp	*140101-140103, 140701-1408, 1416, 1422, 1425, 1426, 143201, 143202, 1434, 1435, 1438, 1439, 1449, 1453- 1455, 1458, 1460, 1462, 1469, 1470, 1474, 1475, 1482, 1486	*0310, 1343, 1345

34	205 bp	515 bp	*1404, 1411, 1428, 1431, 1450, 1468, 1471	
35	250 bp	430 bp	*1404, 1411, 1415, 1428, 1431, 1450, 1452, 1471, 1473, 1476, 1479	*080401, 080404, 0806, 0810, 0812, 0822, 0828, 0831, 1167, 120101-1215, 1217-1219, 1317
36⁵	130 bp	515 bp	*1463, 1467, 1478	*1116, 1120, 130101-130203, 1306, 1310, 1315, 1316, 1327, 1328, 1331, 1332, 1334-1336, 1339-1341, 1351, 1353, 1359, 1361, 1365, 1367, 1369, 1373, 1377, 1379, 1380, 1385, 1387
37	175 bp	430 bp		*0308, 110101-110404, 110601-1121, 1123-1129, 1131-1166, 1168-1170, 1172, 1173
38	205 bp	515 bp	*1437	*1372
39	155 bp	430 bp	*1418, 1433, 1451, 1459, 1464	*0311
40	250 bp	430 bp	*1471	
41	245 bp	430 bp	*1475	
42	225 bp	515 bp	*1476, 1479	
43⁵	140 bp	430 bp	*1482	*0310
44	220 bp	515 bp	*1483	
45⁵	125 bp	515 bp	*1459, 1486	

¹ Alleles 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 DRB1*14 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective lengths of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

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 two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in order to help in the correct orientation of the DRB1*14 subtyping.

In addition, wells number 3, 6, 12, 14, 20, 21, 26, 27, 29, 31, 34, 36, 38, 42, 44 and 45 contain the primer pair giving rise to the longer, 515 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

³For several DRB alleles only partial second exon nucleotide sequences are available. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. We assume that unknown sequences in the first hyperpolymorphic region of the second exon of DRB alleles are conserved within allelic groups and that unknown sequences of codons 87 to 92 are identical with the DRB1*0101 consensus sequence.

⁴Due to the sharing of sequence motifs within the DR52 group of DRB1 alleles, all DRB1*03 alleles, all DRB1*12 alleles, all DRB1*13 alleles as well as most DRB1*11 alleles are amplified by some DRB1*14 primer mixes. In addition, six DRB1*01 alleles, seven DRB1*04 alleles, one DRB1*07 allele, most DRB1*08 alleles, six DRB1*15 alleles and one DRB1*16 allele are amplified by some of the DRB1*14 primer mixes. In addition, the DRB3*0216 allele will be amplified by primer mix 25.

⁵Short specific PCR fragments are less intense and not as sharp as longer specific bands.

⁶Primer mixes 3, 10, 13, 20, 26 and 27 have a tendency of giving rise to nonspecific amplifications.

⁷Primer mixes 3, 4 and 12 may yield less specific PCR product than the other DRB1*14 primer mixes.

⁸Primer mixes 2, 20, 26, 28, 29 and 32 have tendencies of giving rise to primer oligomer formation, most pronounced for primer mix 20.

⁹Primer mix 9: Specific PCR fragment of 130 bp in the DRB1*1462, 1465 and 1478 and in the DRB1*0312, 0410-0412, 0467, 0806, 0810, 0812, 0822, 1304, 1332, 1348, 1358, 1375, 1381, 1389, 1393, 1394 and 1512 alleles. Specific PCR fragment of 250 bp in the DRB1*140501-140503, 1437, 1443, 1445, 1456, 1484 and 1491 and the DRB1*1372 alleles.

¹⁰Primer mix 11: Specific PCR fragment of 85 bp in the DRB1*1416, 1422, 1425, 143201-143202, 1434, 1449, 1452, 1453, 1469, 1474 and DRB1*0114, 0462, 1343 and 1345 alleles. Specific PCR fragment of 170 bp in the DRB1*1411 and DRB1*1167 alleles. Specific PCR fragment of 215 bp in the DRB1*1452 and the DRB1*0805, 0818, 0824, 0825, 120101 to 120202, 120302, 1205 to 1219 and 1317 alleles. Specific PCR fragment of 85 and 215 bp in the DRB1*1431 allele. Specific PCR fragment of 170 and 215 bp in the DRB1*0831 and 1204 alleles.

¹¹Primer mix 14: Specific PCR fragment of 60 bp in the DRB1*1422, 1425, 1453, 1473 and DRB1*0808 alleles. Specific PCR fragment of 130 bp in the DRB1*1427 and DRB1*1109, 112801-112802, 1158, 130501-130502, 1318, 1326, 1342, 135001-135002 and 1608 alleles.

¹²Primer mix 20: Specific PCR fragment of 60 bp in the DRB1 *1463, 1467, 1478, 0412, 0418 and the DRB1*080302, 0810, 0812, 0814, 0815, 0819, 0823, 0827, 0830, 0832-0836, 1145, 1313, 1521 alleles. Specific PCR fragment of 110 bp in the DRB1*1425, 1453, 1458, 1469 and the DRB1*0808 and 1345 alleles. Specific PCR fragment of 170 bp in the DRB1*1404, 1428, 1431, 1439, 1450, 1468, 1471, 1473, 1476, 1479 and the DRB1*080101-080404, 0806-0808, 0810-0817, 0819, 0820, 0822, 0823, 0826, 0828, 0830, 0833, 0834, 0836, 1123, 1125, 1145, 1155, 1164, 1167, 1313, 1347 and 1355 alleles. Specific PCR fragment of 215 bp in the DRB1* 1415 and the DRB1*080101-080404, 0806-0817, 0819, 0821-0823, 0826-0828, 0830, 0832-0836 and 1167 alleles.

Not all specific PCR fragments may be obtained in alleles being amplified by more than one primer pair.

¹³Primer mix 21: Specific PCR fragment of 170 bp in DRB1*1413, 1463, 1465, 1478, 1485 and DRB1*0312, 130301-1304, 1312, 1313, 1321, 1330, 1332, 133301, 1338, 1348, 1349, 1355, 1358, 1365, 1366, 1375, 1381 and 1388 alleles. Specific PCR fragment of 215 bp in the DRB1*1424, 1437 and DRB1*1169 and 1309 alleles.

¹⁴Primer mix 24: Specific PCR fragment of 75 bp in the DRB1*1425 allele. Specific PCR fragment of 115 bp in the DRB1*1441, 1477 and DRB1*0343, 1334 and 1364 alleles. Specific PCR fragment of 135 bp in the DRB1*1436 and DRB1*0318 alleles.

¹⁵Primer mix 25: Specific PCR fragment of 120 bp in the DRB1*140701-140702, 1422, 1425, 1449, 1453, 1468, 1469 and DRB1*0114, 0462, 0469, 0808, 0815, 1345 and the DRB3*0216 allele. Specific PCR fragment of 210 bp in DRB1*1456 allele. Specific PCR fragment of 250 bp in the DRB1*144401-14402 and DRB1*0335 alleles.

¹⁶Primer mix 26: Specific PCR fragment of 190 bp in the DRB1*1445 allele. Specific PCR fragment of 250 bp in the DRB1*140101 to 140103 alleles.

¹⁷Primer mix 29: Specific PCR fragment of 135 bp in the DRB1*1460 allele. Specific PCR fragment of 175 bp in the DRB1*1448 and DRB1*0338, 1331, 1346, 1354 and 1377 alleles.

¹⁸Primer mix 32: Specific PCR fragment of 100 bp in the DRB1*1413, 1463, 1478, 1485 and DRB1*0312, 1332 and 1365 alleles. Specific PCR fragment of 145 bp in the DRB1*1419, 1421 and DRB1*1310 and 1385 alleles.

'w', might be weakly amplified.

INTERPRETATION TABLE

DRB1*14 SSP subtyping

Amplification patterns of the DRB1*1401 to DRB1*1486 alleles

	Well ⁵																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		215 170			130						110 170	215			115
Length of int. pos. control ¹	515	430	515	430	430	515	430	430	430	430	430	515	430	515	430	430	430	430	430	515	215 170	515	430	430
5'-primer(s) ²	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-AgA 3'(196)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-CAA 3'(163)	5'-CAA 3'(163)	5'-ACC 3'(118)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)	5'-gTC 3'(125)
3'-primer(s) ³	5'-TCC 3'(70296)	5'-CAg 3'(57257)	5'-CTg 3'(70295)	5'-CTC 3'(28171)	5'-CAC 3'(86344)	5'-CCA 3'(86344)	5'-CAg 3'(74307)	5'-CAg 3'(57257)	5'-CCA 3'(86344)	5'-CAg 3'(57257)	5'-CCT 3'(58260)	5'-CCT 3'(74308)	5'-gTg 3'(60265)	5'-gAA 3'(67286)	5'-CAg 3'(85344)	5'-CAA 3'(78321)	5'-CCT 3'(71298)	5'-CTg 3'(28171)	5'-CTC 3'(71298)	5'-CAg 3'(74307)	5'-gCT 3'(57257)	5'-gCT 3'(57256)	5'-ggT 3'(47227)	5'-ggA 3'(47227)
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24



INTERPRETATION TABLE																													
DRB1*14 SSP subtyping																													
Amplification patterns of the DRB1*1401 to DRB1*1486 alleles																													
Well ⁵																													
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45									
				175					175					175					245					Length of spec. PCR product(s)					
				250																									
				430																					Length of int. pos. control ¹				
				515																					5'-primer(s) ²				
				515																									
				430																									
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Lot No.: 43G

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75	
PCR product(s)									250		215	170			130					110	215			135	115
Well No.	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 ⁴																									
*140101-140103	1	2				6						12	13					18					22		
*1402			3	4	5																		22		
*140301, 140302				4	5		7																22		
*1404								8					13							20					
*140501, 140502	1					6			9			12				16		18					22		
*140503	1					6			9			12						18					22		
*1406			3	4		6																	22		
*140701, 140702	1	2				5						12	13					18					22		
*1408	1					6						12	13			16		18					22		
*1409			3			5												18					22		
*1410										10			13												
*1411											11					16									
*1412				4		6	7																22		
*1413			3	4	5																	21	22		
*1414	1					5						12				16		18					22		
*1415																			19	20					
*1416		2				6					11		13					18	19				22		
*1417			3			6												18					23		
*1418	1			4		6						12				16							22		
*1419			3	4	5													17					22		
*1420				4		6																	22		
*1421			3			6												17	18				23		
*1422		2				5					11		13	14				18					22		
*142301, 142302	1					6						12				16		18					22		
*1424				4	5																	21	22		
*1425		2				5					11			14				18		20			22		
*1426	1	2				6						12	13					18					22	24	
*1427				4	5		7							14									22		
*1428								8					13		15					20					
*1429			3	4		6									15								22		
*1430			3			5												18					23		
*1431								8			11		13							20					
*143201, 143202	1	2				6						11		13				18					22		
*1433			3			6						12						18					23		
*1434	1					6					11		13			16		18					22		
*1435	1	2				6						12	13					18					23		
*1436	1					5						12				16		18					22	24	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

Lot No.: **43G**

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec.	
210	250			175			145															PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
	26							33														DRB1 allele ⁴
																						*140101-140103
																						*1402
																						*140301, 140302
									34	35												*1404
																						*140501, 140502
																						*140503
					30																	*1406
25								33														*140701, 140702
								33														*1408
																						*1409
																						*1410
									34	35												*1411
					30																	*1412
							32															*1413
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										35												*1415
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							32															*1419
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																						*142301, 142302
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								33														*143201, 143202
					30									39								*1433
								33														*1434
						31		33														*1435
																						*1436
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

Lot No.: 43G

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*1437					6				9								18				21	22		
*1438	1	2			6						12	13					18					22		
*1439	1	2			6				10	12	13						18		20			22		
*1440				4	5		7											19				22		
*1441				4	5																	22		24
*1442	1				5						12				16		18						23	
*1443	1				6				9		12				16	17	18					22		
*144401	1				5						12				16		18					22		
*144402	1				5						12						18					22		
*1445	1				6				9		12				16		18					22		
*1446			3																					
*1447			3	4	5																	22		
*1448			3	4	5																	22		
*1449		2		4	5					11			13									22		
*1450								8					13						20					
*1451			3	4	5						12											22		
*1452			3							11														
*1453		2			5					11			14				18	20					23	
*1454	1	2			6						12	13					18					22		
*1455	w	2			6	7						13					18	19				22		
*1456	1				6				9		12				16		18					22		
*1457									10									19						
*1458	1	2			6						12						18	20				22		
*1459	1				6						12				16		18					22		
*1460	1	2			6						12	13					18					22		
*1461								8					13											
*1462	1	2			6				9		12	13					18					22		
*1463				4	5		7												20	21	22			
*1464	1				6						12				16		18						23	
*1465	1				6				9								18				21		23	
*1467				4	5		7												20			22		
*1468								8					13						20					
*1469		2			5					11							18	20				22		
*1470	1	2			6						12	13										22		
*1471								8					13						20					
*1472	1				6						12	13			16		18						23	
*1473								8					13	14					20					
*1474		2			6					11			13				18					22		
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec. PCR product(s)	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
													38									*1437
			28					33														*1438
								33														*1439
																						*1440
																						*1441
																						*1442
																						*1443
25																						*144401
25																						*144402
	26																					*1445
		27																				*1446
			28																			*1447
				29																		*1448
25								33														*1449
			28						34	35												*1450
													39									*1451
					30					35												*1452
25						31		33														*1453
								33														*1454
								33														*1455
25																						*1456
																						*1457
								33														*1458
					30								39							45		*1459
				29				33														*1460
								33														*1461
																						*1462
							32				36											*1463
					30								39									*1464
																						*1465
											36											*1467
25									34													*1468
25								33														*1469
					30			33														*1470
									34	35				40								*1471
						31																*1472
										35												*1473
								33														*1474
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

Lot No.: **43G**

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*1475	1	2			6							12	13				18					22		
*1476								8												20				
*1477				4	5		7												19			22		24
*1478				4	6	7			9											20	21	22		
*1479								8					13							20				
*1480			3		6												18					22		
*1481	1			4	6																	22		
*1482	1	2			6							12	13				18					22		
*1483			3	4	6																	22		
*1484					6	7			9								18	19				22		
*1485				4	5		7															21	22	
*1486	1	2			6							12	13				18					22		
*010201-010205																16								
*0114										11														
*03010101, 03010102, 030103-030106, 0307, 031301, 0315, 0319, 0322, 0323, 0328, 0332-0334, 0336, 0337, 0339, 1320, 1371, 1378					6												18						23	
*030102, 031302					6												18						23	
*030201				4	5																	22		
*030202				4	5																	22		
*0303				4	6																	22		
*0304, 0321, 0325, 0330, 131101, 131102, 1322, 1324, 1344, 1352, 1368					6												18						23	
*030501, 030502, 0309, 0314, 0340, 131401-131403, 1323, 1325, 1329, 1356, 1362, 1363, 1374, 1382					5												18						23	
*030503					5												18						23	
*0306, 0326					6												18					22		
*0308, 1140, 1159					6												18						23	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec.	
210	250			175			145															PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
								33								41						*1475
										35							42					*1476
																						*1477
					30		32				36											*1478
										35							42					*1479
					30																	*1480
					30																	*1481
								33										43				*1482
					30														44			*1483
																						*1484
							32															*1485
								33													45	*1486
25																						*010201-010205
																						*0114
					30																	*03010101, 03010102, 030103-030106, 0307, 031301, 0315, 0319, 0322, 0323, 0328, 0332-0334, 0336, 0337, 0339, 1320, 1371, 1378
			28		30																	*030102, 031302
																						*030201
			28																			*030202
					30																	*0303
																						*0304, 0321, 0325, 0330, 131101, 131102, 1322, 1324, 1344, 1352, 1368
																						*030501, 030502, 0309, 0314, 0340, 131401-131403, 1323, 1325, 1329, 1356, 1362, 1363, 1374, 1382
			28																			*030503
					30																	*0306, 0326
					30							37										*0308, 1140, 1159
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

Lot No.: **43G**

Lot-specific information

www.olerup.com

Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*0310		2				6							13					18						23
*0311						6						12						18						23
*0312						6			9									18			21			23
*0316						6												18						
*0317					5							12						18						22
*0318						6												18						23 24
*0320						6								15				18						23
*0324						6						12						18						23
*0327				4	5							12												22
*0329, 1386				4	5																			23
*0331, 1370, 1384						6												18						22
*0335					5							12						18						22
*0338				4	5																			22
*0341, 130701, 130702, 1360					5													18						22
*0342, 15030101, 15030102, 1523, 1532																								
*0343						6												18						23 24
*0410, 0411, 0467, 1512									9															
*0412									9												20			
*0418, 080101- 080302, 080402, 080403, 0807, 0813, 0814, 0816, 0817, 0819, 0823, 0826, 0827, 0830, 0832- 0834, 0836, 1521																					20			
*0462										10	11													
*0469										10														
*080401, 080404, *0805, 0818, 0824, 0825, 1216																					20			
*0806, 0810, 0812, 0822												11												
*0808								8						14							20			
*0809, 0821, 0835																					19	20		
*0811								w													20			
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec. PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.
					30	31		33										43			*0310
					30									39							*0311
					30		32														*0312
					30																*0316
			28																		*0317
					30																*0318
					30																*0320
			28		30																*0324
			28																		*0327
																					*0329, 1386
																					*0331, 1370, 1384
25			28																		*0335
				29																	*0338
																					*0341, 130701, 130702, 1360
					30																*0342, 15030101, 15030102, 1523, 1532
																					*0343
																					*0410, 0411, 0467, 1512
																					*0412
																					*0418, 080101- 080302, 080402, 080403, 0807, 0813, 0814, 0816, 0817, 0819, 0823, 0826, 0827, 0830, 0832- 0834, 0836, 1521
25																					*0462
25																					*0469
										35											*080401, 080404, *0805, 0818, 0824, 0825, 1216
										35											*0806, 0810, 0812, 0822
25																					*0808
																					*0809, 0821, 0835
																					*0811
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.

Lot No.: **43G**

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
										215										170				135
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*0815																				20				
*0820					6	7											18	20			22			
*0831, 120101-120302, 1206-1208, 1210-1213, 1217-1219, 1317											11													
*110101-110104, 110106, 110108, 110801, 110802, 111001-111202, 111401-1115, 111901, 111902, 1124, 1126, 112702, 1129, 1132, 1133, 1139, 1149, 1151, 1161, 1162, 1166, 1168					5													18				23		
*110105					5											16	18						23	
*110107					5												18							
*110201-110402, 110404, 110601, 1107, 1118, 1121, 1134-1136, 1138, 1142-1144, 1146, 1147, 1157, 1160, 1163, 116501, 116502, 1170						6												18					23	
*110403, 110602					6											16	18						23	
*1109, 112801, 112802					5								14				18						23	
*111301, 111302	1					6										16	18						23	
*1116						6											18						23	
*1117	1					6					12					16	18					22		
*1120					5												18						23	
*1123, 1145, 1164					5		7										18	20					23	
*1125, 1155						6	7										18	20					23	
*112701					5												18						23	
*1131					5												18						23	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec.	
210	250			175			145															PCR product(s)
250																						
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
																						*0815
																						*0820
										35												*0831, 120101-120302, 1206-1208, 1210-1213, 1217-1219, 1317
												37										*110101-110104, 110106, 110108, 110801, 110802, 111001-111202, 111401-1115, 111901, 111902, 1124, 1126, 112702, 1129, 1132, 1133, 1139, 1149, 1151, 1161, 1162, 1166, 1168
												37										*110105
												37										*110107
												37										*110201-110402, 110404, 110601, 1107, 1118, 1121, 1134-1136, 1138, 1142-1144, 1146, 1147, 1157, 1160, 1163, 116501, 116502, 1170
												37										*110403, 110602
												37										*1109, 112801, 112802
												37										*111301, 111302
					30						36	37										*1116
												37										*1117
											36	37										*1120
												37										*1123, 1145, 1164
												37										*1125, 1155
			28									37										*112701
						31						37										*1131
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

Lot No.: **43G**

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*1137					5												18				22			
*1141, 1148, 1150, 1156						6											18				22			
*1152	1					6					12	13			16		18				22			
*1153					5						12						18						23	
*115401						6					12				16		18						23	
*115402						6					12						18						23	
*1158						6								14			18						23	
*1167										11										20				
*1169					5												18				21		23	
*1172					5																		23	
*1173					5												17	18					23	
*1204, 1209										11					16									
*1205, 1214, 1215										11					15									
*130101, 130102, 1306, 1327, 1328, 1351, 1359, 1369, 1379, 1387						6											18						23	
*130103						6									16		18						23	
*130201-130203, 1339, 1341, 1373					5												18						23	
*130301, 130302, 133301, 1388					5												17	18			21	22		
*1304, 1375						6		9									18				21		23	
*130501, 130502, 135001, 135002					5									14			18						23	
*1308						6											18	19				22		
*1309						6											18				21		23	
*1310			3			6											17	18					23	
*1312, 1338, 1349					5												18				21	22		
*1313, 1355					5		7										18		20		21	22		
*1315				4		6																		23
*1316																	18							23
*1318						6	7							14			18							23
*1319				4		6													19			22		
*1321, 1330					5												18				21		23	
*1326				4	5									14									22	
*1331					5												18							23
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec.	
210	250			175			145															PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
												37										*1137
												37										*1141, 1148, 1150, 1156
												37										*1152
												37										*1153
												37										*115401
												37										*115402
				30								37										*1158
										35												*1167
												37										*1169
												37										*1172
												37										*1173
										35												*1204, 1209
										35												*1205, 1214, 1215
					30						36											*130101, 130102, 1306, 1327, 1328, 1351, 1359, 1369, 1379, 1387
				30							36											*130103
											36											*130201-130203, 1339, 1341, 1373
																						*130301, 130302, 133301, 1388
																						*1304, 1375
																						*130501, 130502, 135001, 135002
																						*1308
				30																		*1309
				30	32						36											*1310
																						*1312, 1338, 1349
																						*1313, 1355
				30							36											*1315
											36											*1316
				30																		*1318
																						*1319
																						*1321, 1330
																						*1326
				29							36											*1331
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

Lot No.: 43G

Lot-specific information

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Length of spec.	210	175	140	85	260	260	225	170	130	175	85	225	115	60	185	105	220	85	145	60	170	145	145	75
PCR product(s)									250		170			130						110	215			115
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
*1332						6			9									18			21	22		
*1334					5													18					23	24
*1335, 1380						6												18						
*1336					5													18				22		
*1337					5												17	18				22		
*1340						6												18				22		
*1342						6								14				18					23	
*1343		2				6				11			13					18					23	
*1345		2			5					11								18		20			23	
*1346					5													18					23	
*1347					5		7											18		20		22		
*1348, 1358						6			9									18				21	22	
*1353				4		6																22		
*1354						6												18					23	
*1357				4		6													19				23	
*1361						6												18					23	
*1364						6												18	19				23	24
*1365					5													18				21	22	
*1366					5												17	18				21	23	
*1367																								
*1372						6			9									18	19			22		
*1376						6				12					16			18	19			22		
*1377						6												18					23	
*1381						6			9									17	18			21	22	
*1383						6												18	19				23	
*1385			3	4	5												17					22		
*1608														14										
DRB1 allele ⁵																								
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DRB3*0216																								
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Lot No.: **43G**

Lot-specific information

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120	190	220	230	135	200	80	100	175	205	250	130	175	205	155	250	245	225	140	220	125	Length of spec.	
250	210	250		175			145															PCR product(s)
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
				30			32				36											*1332
											36											*1334
				30							36											*1335, 1380
											36											*1336
											36											*1337
				30							36											*1340
				30																		*1342
				30	31			33														*1343
25						31		33														*1345
				29																		*1346
																						*1347
																						*1348, 1358
				30							36											*1353
				29																		*1354
																						*1357
			28	30							36											*1361
																						*1364
							32				36											*1365
																						*1366
											36											*1367
													38									*1372
																						*1376
				29	30						36											*1377
																						*1381
																						*1383
							32				36											*1385
																						*1608
																						DRB1 allele ⁵
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	
25																						DRB3*0216
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Well No.	

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 430 base pairs, for most wells, or a band of 515 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the longer, 515 bp, internal positive control band in order to help in the correct orientation of the DRB1*14 subtyping.

In addition, wells number 3, 6, 12, 14, 21, 26, 27, 29, 31, 34, 36, 38, 42, 44 and 45 contain the primer pair giving rise to the longer, 515 bp, internal positive control band in order to allow kit identification.

²The codon, and in parenthesis the nucleotide, in the 2nd and 3rd exon, matching the specificity-determining 3'-end of the primer is given. Codon and 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 codon, and in parenthesis the nucleotide, in the 2nd and 3rd exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Codon and 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.

⁴The DRB1*1466 allele has been renamed to DRB1*143202

⁵Primer mix 9: Specific PCR fragment of 130 bp in the DRB1*1462, 1465 and 1478 and in the DRB1*0312, 0410-0412, 0467, 0806, 0810, 0812, 0822, 1304, 1332, 1348, 1358, 1375, 1381, 1389, 1393, 1394 and 1512 alleles. Specific PCR fragment of 250 bp in the DRB1*140501-140503, 1437, 1443, 1445, 1456, 1484 and 1491 and the DRB1*1372 alleles.

Primer mix 11: Specific PCR fragment of 85 bp in the DRB1*1416, 1422, 1425, 143201-143202, 1434, 1449, 1452, 1453, 1469, 1474 and DRB1*0114, 0462, 1343 and 1345 alleles. Specific PCR fragment of 170 bp in the DRB1*1411 and DRB1*1167 alleles. Specific PCR fragment of 215 bp in the DRB1*1452 and the DRB1*0805, 0818, 0824, 0825, 120101 to 120202, 120302, 1205 to 1219 and 1317 alleles. Specific PCR fragment of 85 and 215 bp in the DRB1*1431 allele. Specific PCR fragment of 170 and 215 bp in the DRB1*0831 and 1204 alleles.

Primer mix 14: Specific PCR fragment of 60 bp in the DRB1*1422, 1425, 1453, 1473 and DRB1*0808 alleles. Specific PCR fragment of 130 bp in the DRB1*1427 and DRB1*1109, 112801-112802, 1158, 130501-130502, 1318, 1326, 1342, 135001-135002 and 1608 alleles.

Primer mix 20: Specific PCR fragment of 60 bp in the DRB1 *1463, 1467, 1478, 0412, 0418 and the DRB1*080302, 0810, 0812, 0814, 0815, 0819, 0823, 0827, 0830, 0832-0836, 1145, 1313, 1521 alleles.

Specific PCR fragment of 110 bp in the DRB1*1425, 1453, 1458, 1469 and the DRB1*0808 and 1345 alleles. Specific PCR fragment of 170 bp in the DRB1*1404, 1428, 1431, 1439, 1450, 1468, 1471, 1473, 1476, 1479 and the DRB1*080101-080404, 0806-0808, 0810-0817, 0819, 0820, 0822, 0823, 0826, 0828, 0830, 0833, 0834, 0836, 1123, 1125, 1145, 1155, 1164, 1167, 1313, 1347 and 1355 alleles. Specific PCR fragment of 215 bp in the DRB1* 1415 and the DRB1*080101-080404, 0806-0817, 0819, 0821-0823, 0826-0828, 0830, 0832-0836 and 1167 alleles.

Not all specific PCR fragments may be obtained in alleles being amplified by more than one primer pair.

Primer mix 21: Specific PCR fragment of 170 bp in DRB1*1413, 1463, 1465, 1478, 1485 and DRB1*0312, 130301-1304, 1312, 1313, 1321, 1330, 1332, 133301, 1338, 1348, 1349, 1355, 1358, 1365, 1366, 1375, 1381 and 1388 alleles. Specific PCR fragment of 215 bp in the DRB1*1424, 1437 and DRB1*1169 and 1309 alleles.

Primer mix 24: Specific PCR fragment of 75 bp in the DRB1*1425 allele. Specific PCR fragment of 115 bp in the DRB1*1441, 1477 and DRB1*0343, 1334 and 1364 alleles. Specific PCR fragment of 135 bp in the DRB1*1436 and DRB1*0318 alleles.

Primer mix 25: Specific PCR fragment of 120 bp in the DRB1*140701-140702, 1422, 1425, 1449, 1453, 1468, 1469 and DRB1*0114, 0462, 0469, 0808, 0815, 1345 and the DRB3*0216 allele. Specific PCR fragment of 210 bp in DRB1*1456 allele. Specific PCR fragment of 250 bp in the DRB1*144401-144402 and DRB1*0335 alleles.

Primer mix 26: Specific PCR fragment of 190 bp in the DRB1*1445 allele. Specific PCR fragment of 250 bp in the DRB1*140101 to 140103 alleles.

Primer mix 29: Specific PCR fragment of 135 bp in the DRB1*1460 allele. Specific PCR fragment of 175 bp in the DRB1*1448 and DRB1*0338, 1331, 1346, 1354 and 1377 alleles.

Primer mix 32: Specific PCR fragment of 100 bp in the DRB1*1413, 1463, 1478, 1485 and DRB1*0312, 1332 and 1365 alleles. Specific PCR fragment of 145 bp in the DRB1*1419, 1421 and DRB1*1310 and 1385 alleles.

'w', might be weakly amplified.

CELL LINE VALIDATION SHEET																				
DRB1*14 SSP subtyping kit																				
				Prod. No.:	Well															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	IHWC cell line	DRB1			200737301	200737302	200965003	200737304	200737305	200737306	200737307	200965008	200965009	200737310	200737311	200737312	200737313	200965014	200737315	200737316
1	9001 SA	*0101			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*1502	*0405		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*1502			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*0301			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011	*1601			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*0407	*0803		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*0301			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
8	9025 DEU	*0401			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*0402			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*0405			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*0701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*0701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*0101			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*0802			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*0901			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*1101			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*0301	*1301		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
18	9257 32367	*0901	*1101		-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
19	9038 BM16	*1201			-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
20	9059 SLE005	*1302			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*1402			-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*1302	*1401		+	+	-	-	+	+	-	-	-	-	-	+	+	-	-	-
23	9124 IHL	*0803	*1414		+	-	-	-	+	-	-	-	-	-	+	-	-	-	-	+
24	9035 JBUSH	*1101			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*0701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*0301			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007	*0405	*1001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
28	9320 BEL5GB	*0416	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*0701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*0302			-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*0301			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
32	9297 HAG	*1303			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*0404			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*1101			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*0403			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*0403	*0406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*1301			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
38	9099 LZL	*1402			-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*0301	*0401		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199	*0701	*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*1302			-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*0803			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*0901			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*1401			+	+	-	-	-	+	-	-	-	-	-	+	+	-	-	-
45	9239 SHJO	*0701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*1501			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*1104	*1201		-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-
48	9303 TER-ND	*0103			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CELL LINE VALIDATION SHEET																				
DRB1*14 SSP subtyping kit																				
				Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
				Prod. No.:	200737317	200737318	200737319	200965020	200737321	200737322	200737323	200965024	200737325	200965026	200737327	200737328	200852029	200737330	200737331	200737332
	IHWC cell line	DRB1																		
1	9001 SA	*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707	*1502	*0405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324	*1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373	*0301		-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
5	9009 KAS011	*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM	*0407	*0803	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL	*0301		-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
8	9025 DEU	*0401		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR	*0402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3	*0405		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM	*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA	*0802		-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB	*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007	*1101		-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540	*0301	*1301	-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
18	9257 32367	*0901	*1101	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
19	9038 BM16	*1201		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005	*1302		-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
21	9064 AMALA	*1402		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE	*1302	*1401	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
23	9124 IHL	*0803	*1414	-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH	*1101		-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
25	9049 IBW9	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49	*0301		-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
27	9191 CH1007	*0405	*1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB	*0416	*0701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH	*0302		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF	*0301		-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
32	9297 HAG	*1303		+	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B	*0404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF	*1101		-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
35	9302 SSTO	*0403		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17	*0403	*0406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB	*1301		-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
38	9099 LZL	*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML	*0301	*0401	-	+	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
40	9134 WHONP199	*0701	*0901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301	*1302		-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
42	9066 TAB089	*0803		-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526	*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM	*1401		-	+	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-
45	9239 SHJO	*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU	*1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO	*1104	*1201	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
48	9303 TER-ND	*0103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CELL LINE VALIDATION SHEET																		
DRB1*14 SSP subtyping kit																		
					Well													
					33	34	35	36	37	38	39	40	41	42	43	44	45	
					Prod. No.:	200852033	200852034	200852035	200965036	200852037	200852038	200852039	200852040	200852041	200852042	200965043	200965044	200965045
	IHWC cell line		DRB1															
1	9001 SA		*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280 LK707		*1502	*0405	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275 GU373		*0301		-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353 SM		*0407	*0803	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL		*0301		-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025 DEU		*0401		-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR		*0402		-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107 LKT3		*0405		-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004 JESTHOM		*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA		*0802		-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037 SWEIG007		*1101		-	-	-	-	+	-	-	-	-	-	-	-	-	-
17	9282 CTM3953540		*0301	*1301	-	-	-	+	-	-	-	-	-	-	-	-	-	-
18	9257 32367		*0901	*1101	-	-	-	-	+	-	-	-	-	-	-	-	-	-
19	9038 BM16		*1201		-	-	+	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*1302		-	-	-	+	-	-	-	-	-	-	-	-	-	-
21	9064 AMALA		*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*1302	*1401	+	-	-	+	-	-	-	-	-	-	-	-	-	-
23	9124 IHL		*0803	*1414	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035 JBUSH		*1101		-	-	-	-	+	-	-	-	-	-	-	-	-	-
25	9049 IBW9		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*0301		-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191 CH1007		*0405	*1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320 BEL5GB		*0416	*0701	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050 MOU		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021 RSH		*0302		-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019 DUCAF		*0301		-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297 HAG		*1303		-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098 MT14B		*0404		-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104 DHIF		*1101		-	-	-	-	+	-	-	-	-	-	-	-	-	-
35	9302 SSTO		*0403		-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024 KT17		*0403	*0406	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065 HHKB		*1301		-	-	-	+	-	-	-	-	-	-	-	-	-	-
38	9099 LZL		*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315 CML		*0301	*0401	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134 WHONP199		*0701	*0901	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055 H0301		*1302		-	-	-	+	-	-	-	-	-	-	-	-	-	-
42	9066 TAB089		*0803		-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*1401		+	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239 SHJO		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013 SCHU		*1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*1104	*1201	-	-	+	-	+	-	-	-	-	-	-	-	-	-
48	9303 TER-ND		*0103		-	-	-	-	-	-	-	-	-	-	-	-	-	-

CERTIFICATE OF ANALYSIS

Olerup SSP® DRB1*14 SSP

Product number: 101.117-12/03 – including *Taq* pol.
Lot number: 43G
Expiry date: 2011-October-01
Number of tests: 12 tests – Product No. 101.117-12
 3 tests – Product No. 101.117-03
Number of wells per test: 45

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2007-373-01	16	2007-373-16	31	2007-373-31
2	2007-373-02	17	2007-373-17	32	2007-373-32
3	2009-650-03	18	2007-373-18	33	2008-520-33
4	2007-373-04	19	2007-373-19	34	2008-520-34
5	2007-373-05	20	2009-650-20	35	2008-520-35
6	2007-373-06	21	2007-373-21	36	2009-650-36
7	2007-373-07	22	2007-373-21	37	2008-520-37
8	2009-650-08	23	2007-373-23	38	2008-520-38
9	2009-650-09	24	2009-650-24	39	2008-520-39
10	2007-373-10	25	2007-373-25	40	2008-520-40
11	2007-373-11	26	2009-650-26	41	2008-520-41
12	2007-373-12	27	2007-373-27	42	2008-520-42
13	2007-373-13	28	2007-373-28	43	2009-650-43
14	2009-650-14	29	2008-520-29	44	2009-650-44
15	2007-373-15	30	2007-373-30	45	2009-650-45

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 10, 14, 15, 19, 24, 27 to 29, 31 and 38 to 45 were available.

The specificities of the primers in primer solutions 10, 14, 15, 19, 24, 27 to 29, 31, 38, 39, 41 to 43 and 45 were tested by separately adding one additional 5'-primer, respectively, one or several additional 3'-primers.

In primer solution 40 it was only possible to test the 5'-primer, the 3'-primer was not possible to test.

In primer solution 44 it was only possible to test the 3'-primer, the 5'-primer was not possible to test.

In primer solutions 9, 10, 14 and 20 one of the 5'-primers was not possible to test, and in primer solutions 17, 24, 25, 26, 29 and 37 one or two of the 3'-primers were not possible to test.

Additional primers in primer solutions 11, 20, 21, 26, 30 and 32 were tested by separately adding one 5'-primer and/or one 3'-primer.

Lot No.: **43G**

Lot-specific information

www.olerup.com

Results: No false positive or false negative amplifications were obtained.

Date of approval: 2009-November-08

Approved by:

Quality Control, Supervisor

Lot No.: **43G**

Lot-specific information

www.olerup.com

Declaration of Conformity

Product name: *Olerup* SSP® DRB1*14
Product number: 101.117-12/03
Lot number: 43G

Intended use: DRB1*14 high resolution histocompatibility testing

Manufacturer: *Olerup* SSP AB
Hasselstigen 1
SE-133 33 Saltsjöbaden, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, *Olerup* SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2008 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at *Olerup* SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

The Authorized Representative located within the Community is: *Olerup* SSP AB.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Saltsjöbaden, Sweden
2009-November-08

Olle Olerup
Managing Director

Lot No.: **43G**

Lot-specific information

www.olerup.com

ADDRESSES:

Manufacturer:

Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

Tel: +46-8-717 88 27

Fax: +46-8-717 88 18

E-mail: info-ssp@olerup.com

Web page: <http://www.olerup.com>

Distributed by:

Olerup GmbH, Löwengasse 47 / 6, AT-1030 Vienna, Austria.

Tel: +43-1-710 15 00

Fax: +43-1-710 15 00 10

E-mail: support-at@olerup.com

Web page: <http://www.olerup.com>

Olerup Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

Tel: 1-877-OLERUP1

Fax: 610-344-7989

E-mail: info.us@olerup.com

Web page: <http://www.olerup.com>

For information on *Olerup* SSP distributors worldwide, contact **Olerup GmbH**.