

Lot No.: **82E**

Lot-specific information

Olerup SSP[®] DRB1*13

Product number: 101.116-24u/03u – without *Taq* pol.
Lot number: 82E
Expiry date: 2010-June 01
Number of tests: 24 tests – Product No. 101.116-24u
3 tests – Product No. 101.116-03u
Number of wells per test: 32
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. 82E.

CHANGES COMPARED TO THE PREVIOUS *OLERUP SSP[®]* DRB1*13 LOT

The DRB1*13 specificity and interpretation tables have been updated for the DRB alleles described since the previous *Olerup SSP[®]* DRB1*13 lot was made (**Lot No. X88**).

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

Well	5'-primer	3'-primer	rationale
2	-	Modified	Decreased tendency of nonspecific amplifications.
11	-	Modified	Increased yield of specific PCR product
17	-	Added	Primer added for the DRB1*1380 allele.
26	Exchanged	-	New primer for the DRB1*135002 allele.

Lot No.: **82E**

Lot-specific information

Lot No.: **82E**

Lot-specific information

PRODUCT DESCRIPTION

DRB1*13 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the DRB1*1301 to DRB1*1383 alleles.

PLATE LAYOUT

Each test consists of 32 PCR reactions in a 32 well cut PCR plate.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

The 32 well cut PCR plate is marked with 'DRB1*13'.

Well No. 1 is marked with the Lot No '82E'.

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

Please note: When removing each 32 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*13 PCR-SSP subtypings will be influenced by all DRB1*03 alleles, five DRB1*04 alleles, five DRB1*08 alleles, the DRB1*0906 allele, most DRB1*11 alleles, the DRB1*12 alleles, most DRB1*14 alleles, most DRB1*15 alleles, the DRB1*1608 allele when present on the other haplotype. In addition, the DRB3*0108, DRB3*0206 and DRB3*0220 alleles will be amplified by primer mix 7.

UNIQUELY IDENTIFIED ALLELES

All the phenotypically different DRB1*13 alleles, i.e. **DRB1*1301 to DRB1*1383**, recognized by the HLA Nomenclature Committee in April 2008¹ will give rise to unique amplification patterns by the primers in the DRB1*13 subtyping kit.

The DRB1*13 subtyping kit cannot distinguish the DRB1*130101 and 130102 alleles, the DRB1*130201 and 130203 alleles, the DRB1*130301 and 130302 alleles, DRB1*130501 and 130502, the DRB1*130701 and 130702, the DRB1*131401 to 131403 alleles and the the DRB1*135001 and 135002 alleles.

¹HLA-A alleles listed on the IMGT/HLA web page 2008-April-08, release 2.21.0, www.ebi.ac.uk/imgt/hla.

Lot No.: **82E**

Lot-specific information

RESOLUTION IN HOMO- AND HETEROZYGOTES

The 83 DRB1*13 alleles give rise to 85 different amplification patterns, DRB1*130101-130102 and 130103, DRB1*130201/130203 and 130202 having different amplification patterns. These can be combined in 3655 homozygous and heterozygous combinations. 1269 of these genotypes do not give rise to unique amplification patterns. The different lengths of the specific PCR products in lanes 15, 17, 19, 20, 22, 23, 24, 31 and 32 were not considered in these calculations.

+++++--- +---+---+ -+----- +---+---+ 1358,1363 = 1363,1381
+++++--- +---+---+ -+----- +---+---+ 1336,1355 = 1347,1365 = 1355,1365
+++++--- +---+---+ -+----- +---+---+ 1331,1349 = 1346,1365
+++++--- +---+---+ -+----- +---+---+ 1302,1349 = 1314,1365 = 1321,1336 =
1321,1365
+++++--- +---+---+ -+----- +---+---+ 1307,1365 = 1336,1349 = 1349,1365
+++++--- +---+---+ -+----- +---+---+ 1350,1365 = 1362,1365
+++++--- +---+---+ -+----- +---+---+ 1301,1355 = 1349,1361 = 1355,1361
+++++--- +---+---+ -+----- +---+---+ 1332,1347 = 1332,1355 = 1340,1355
+++++--- +---+---+ -+----- +---+---+ 1314,1332 = 1321,1332 = 1321,1340
+++++--- +---+---+ -+----- +---+---+ 1307,1332 = 1332,1349 = 1340,1349
+++++--- +---+---+ -+----- +---+---+ 1321,1335 = 1321,1379
+++++--- +---+---+ -+----- +---+---+ 1324,1333 = 1333,1375
+++++--- +---+---+ -+----- +---+---+ 1304,1347 = 1304,1355 = 1313,1324 =
1313,1375 = 1322,1355
+++++--- +---+---+ -+----- +---+---+ 1347,1348 = 1348,1355 = 1355,1370
+++++--- +---+---+ -+----- +---+---+ 1303,1324 = 1303,1375 = 1337,1375
+++++--- +---+---+ -+----- +---+---+ 1304,1307 = 1304,1349 = 1312,1324 =
1312,1375 = 1322,1349
+++++--- +---+---+ -+----- +---+---+ 1314,1348 = 1321,1348 = 1321,1370 =
1348,1362
+++++--- +---+---+ -+----- +---+---+ 1307,1348 = 1348,1349 = 1349,1370
+++++--- +---+---+ -+----- +---+---+ 1324,1366 = 1366,1375
+++++--- +---+---+ -+----- +---+---+ 1304,1314 = 1304,1321 = 1304,1362 =
1321,1322 = 1324,1330 = 1330,1375 =
1375,1382
+++++--- +---+---+ -+----- +---+---+ 1338,1347 = 1338,1355
+++++--- +---+---+ -+----- +---+---+ 1314,1338 = 1321,1338 = 1323,1349 =
1338,1362
+++++--- +---+---+ -+----- +---+---+ 1307,1338 = 1338,1349
+++++--- +---+---+ -+----- +---+---+ 1354,1358 = 1354,1381
+++++--- +---+---+ -+----- +---+---+ 1324,1358 = 1324,1381 = 1358,1375 =
1375,1381
+++++--- +---+---+ -+----- +---+---+ 1326,1358 = 1326,1381
+++++--- +---+---+ -+----- +---+---+ 1326,1330 = 1326,1366
+++++--- +---+---+ -+----- +---+---+ 1303,1326 = 1312,1326 = 1326,1333
+++++--- +---+---+ -+----- +---+---+ 1312,1318 = 1313,1318 = 1313,1342
+++++--- +---+---+ -+----- +---+---+ 1347,1381 = 1355,1381
+++++--- +---+---+ -+----- +---+---+ 1314,1381 = 1321,1381 = 1362,1381
+++++--- +---+---+ -+----- +---+---+ 1307,1381 = 1349,1381
+++++--- +---+---+ -+----- +---+---+ 1347,1358 = 1355,1358
+++++--- +---+---+ -+----- +---+---+ 1314,1358 = 1321,1358 = 1358,1362
+++++--- +---+---+ -+----- +---+---+ 1307,1358 = 1349,1358
+++++--- +---+---+ -+----- +---+---+ 1333,1347 = 1333,1355
+++++--- +---+---+ -+----- +---+---+ 1314,1333 = 1321,1333 = 1333,1362
+++++--- +---+---+ -+----- +---+---+ 1307,1333 = 1333,1349
+++++--- +---+---+ -+----- +---+---+ 1347,1366 = 1355,1366
+++++--- +---+---+ -+----- +---+---+ 1303,1347 = 1303,1355 = 1337,1355

Lot No.: **82E**

Lot-specific information

+++++---	+---+---	-----	+--+-----	1303,1314 = 1303,1321 = 1303,1362 =
				1307,1366 = 1321,1337 = 1349,1366
+++++---	+---+---	-----	+-----+	1303,1307 = 1303,1349 = 1337,1349
+++++---	+---+---	-----	+--+-----	1314,1366 = 1321,1366 = 1362,1366
+++++---	+---+---	-+-----	+--+-----	1313,1314 = 1313,1321 = 1313,1362 =
				1330,1347 = 1330,1355 = 1355,1382
+++++---	+---+---	-+-----	+-----	1307,1313 = 1312,1347 = 1312,1355 =
				1313,1347 = 1313,1349 = 1313,1355
+++++---	+---+---	-----	+--+-----	1307,1330 = 1312,1314 = 1312,1321 =
				1312,1362 = 1330,1349 = 1349,1382
+++++---	+---+---	-----	+-----	1307,1312 = 1312,1349
+++++---	+---+---	-----	+--+-----	1314,1330 = 1321,1330 = 1321,1382 =
				1330,1362
+++++---	+---+---	-----	+--+-----	1324,1365 = 1336,1375 = 1365,1375
+++++---	+---+---	-----	+--+-----	1324,1332 = 1332,1375 = 1340,1375
+++++---	+---+---	-----	+--+-----	1335,1375 = 1375,1379
+++++---	+---+---	-----	+--+-----	1301,1375 = 1369,1375
+++++---	+---+---	-----	+--+-----	1324,1338 = 1338,1375
+++++---	+---+---	-----	+--+-----	1324,1348 = 1348,1375 = 1370,1375
+++++---	+---+---	-----	+--+-----	1352,1375 = 1375,1383
+++++---	+---+---	-----	+--+-----	1304,1324 = 1304,1375 = 1322,1375
+++++---	+---+---	-----	+--+-----	130103,1326 = 1326,1328
+++++---	+---+---	-----	+--+-----	1301,1326 = 1326,1380
+++++---	+---+---	-----	+--+-----	1305,1335 = 1305,1379
+++++---	+---+---	-----	+--+-----	1335,1350 = 1350,1379
+++++---	+---+---	-----	+--+-----	1302,1342 = 1306,1363
+++++---	+---+---	-----	+--+-----	1316,1326 = 1326,1374
+++++---	+---+---	-----	+--+-----	1307,1331 = 1336,1346
+++++---	+---+---	-----	+--+-----	1302,1307 = 1314,1336
+++++---	+---+---	-----	+--+-----	1336,1350 = 1336,1362
+++++---	+---+---	-----	+--+-----	1305,1316 = 1305,1374
+++++---	+---+---	-----	+--+-----	1316,1350 = 1350,1374 = 1362,1374
+++++---	+---+---	-----	+--+-----	1350,1373 = 1362,1373
+++++---	+---+---	-----	+--+-----	1341,1350 = 1341,1362
+++++---	+---+---	-----	+--+-----	1302,1346 = 1314,1331 = 1331,1346
+++++---	+---+---	-----	+--+-----	1331,1350 = 1331,1362
+++++---	+---+---	-----	+--+-----	1334,1350 = 1334,1362
+++++---	+---+---	-----	+--+-----	1339,1350 = 1339,1362
+++++---	+---+---	-----	+--+-----	1302,1350 = 1302,1362
+++++---	+---+---	-----	+--+-----	130202,1350 = 130202,1362
+++++---	+---+---	-----	+--+-----	1301,1347 = 1307,1361 = 1347,1361
+++++---	+---+---	-----	+--+-----	1335,1346 = 1346,1379
+++++---	+---+---	-----	+--+-----	1314,1335 = 1314,1379
+++++---	+---+---	-----	+--+-----	1335,1362 = 1362,1379
+++++---	+---+---	-----	+--+-----	1324,1377 = 1354,1377
+++++---	+---+---	-----	+--+-----	1318,1335 = 1318,1379
+++++---	+---+---	-----	+--+-----	1301,1318 = 1318,1361 = 1342,1361
+++++---	+---+---	-----	+--+-----	1311,1335 = 1311,1379
+++++---	+---+---	-----	+--+-----	1335,1342 = 1342,1379
+++++---	+---+---	-----	+--+-----	1314,1319 = 1319,1362
+++++---	+---+---	-----	+--+-----	1314,1376 = 1362,1376
+++++---	+---+---	-----	+--+-----	1314,1372 = 1362,1372
+++++---	+---+---	-----	+--+-----	1308,1314 = 1308,1362
+++++---	+---+---	-----	+--+-----	1314,1370 = 1362,1370
+++++---	+---+---	-----	+--+-----	1314,1357 = 1357,1362
+++++---	+---+---	-----	+--+-----	1314,1383 = 1362,1383
+++++---	+---+---	-----	+--+-----	1314,1322 = 1322,1362 = 1324,1382
+++++---	+---+---	-----	+--+-----	1314,1368 = 1346,1352 = 1346,1368
+++++---	+---+---	-----	+--+-----	1314,1352 = 1352,1362

Lot No.: **82E**

Lot-specific information

+++++---	+---+---	-----	+---+---	1314,1345 = 1345,1362
+++++---	+---+---	-----	+---+---	1314,1323 = 1323,1362
+++++---	+---+---	-----	+---+---	1306,1326 = 1310,1326
+++++---	+---+---	-----	+---+---	1314,1377 = 1346,1377
+++++---	+---+---	-----	+---+---	1314,1337 = 1337,1362
+++++---	+---+---	-----	+---+---	1314,1382 = 1362,1382
+++++---	+---+---	-----	+---+---	1335,1363 = 1363,1379
+++++---	+---+---	-----	+---+---	1308,1363 = 1363,1370
+++++---	+---+---	-----	+---+---	1302,1354 = 1331,1354 = 1339,1354
+++++---	+---+---	-----	+---+---	1322,1363 = 1363,1383
+++++---	+---+---	-----	+---+---	1316,1363 = 1363,1374
+++++---	+---+---	-----	+---+---	1301,1354 = 1335,1354 = 1354,1369 = 1354,1379
+++++---	+---+---	-----	+---+---	1324,1335 = 1324,1379
+++++---	+---+---	-----	+---+---	1301,1324 = 1324,1369
+++++---	+---+---	-----	+---+---	1352,1354 = 1354,1368 = 1354,1383
+++++---	+---+---	-----	+---+---	1324,1352 = 1324,1383
+++++---	+---+---	-----	+---+---	1329,1358 = 1329,1381
+++++---	+---+---	-----	+---+---	1358,1374 = 1374,1381
+++++---	+---+---	-----	+---+---	1358,1373 = 1373,1381
+++++---	+---+---	-----	+---+---	1341,1358 = 1341,1381
+++++---	+---+---	-----	+---+---	1331,1358 = 1331,1381
+++++---	+---+---	-----	+---+---	1334,1358 = 1334,1381
+++++---	+---+---	-----	+---+---	1339,1358 = 1339,1381
+++++---	+---+---	-----	+---+---	1302,1358 = 1302,1381
+++++---	+---+---	-----	+---+---	1336,1358 = 1336,1381 = 1358,1365 = 1365,1381
+++++---	+---+---	-----	+---+---	130202,1358 = 130202,1381
+++++---	+---+---	-----	+---+---	1312,1329 = 1325,1365
+++++---	+---+---	-----	+---+---	1333,1336 = 1333,1365
+++++---	+---+---	-----	+---+---	1313,1336 = 1313,1365
+++++---	+---+---	-----	+---+---	1302,1303 = 1336,1366 = 1365,1366
+++++---	+---+---	-----	+---+---	1302,1312 = 1330,1336 = 1330,1365 = 1365,1382
+++++---	+---+---	-----	+---+---	1303,1336 = 1303,1365 = 1337,1365
+++++---	+---+---	-----	+---+---	1312,1336 = 1312,1365
+++++---	+---+---	-----	+---+---	130202,1303 = 130202,1312
+++++---	+---+---	-----	+---+---	130202,1330 = 130202,1366
+++++---	+---+---	-----	+---+---	1303,1315 = 1315,1333
+++++---	+---+---	-----	+---+---	1303,1353 = 1333,1353
+++++---	+---+---	-----	+---+---	1332,1333 = 1333,1340
+++++---	+---+---	-----	+---+---	1301,1313 = 1312,1361 = 1313,1361
+++++---	+---+---	-----	+---+---	1313,1332 = 1313,1340
+++++---	+---+---	-----	+---+---	1332,1366 = 1340,1366
+++++---	+---+---	-----	+---+---	1330,1332 = 1330,1340 = 1332,1382
+++++---	+---+---	-----	+---+---	1303,1332 = 1303,1340 = 1332,1337
+++++---	+---+---	-----	+---+---	1312,1332 = 1312,1340
+++++---	+---+---	-----	+---+---	1335,1366 = 1366,1379
+++++---	+---+---	-----	+---+---	1330,1335 = 1330,1379
+++++---	+---+---	-----	+---+---	1358,1371 = 1371,1381
+++++---	+---+---	-----	+---+---	1358,1378 = 1378,1381
+++++---	+---+---	-----	+---+---	1343,1358 = 1343,1381
+++++---	+---+---	-----	+---+---	1320,1358 = 1320,1381
+++++---	+---+---	-----	+---+---	1358,1369 = 1369,1381
+++++---	+---+---	-----	+---+---	1315,1358 = 1315,1381
+++++---	+---+---	-----	+---+---	1353,1358 = 1353,1381
+++++---	+---+---	-----	+---+---	1328,1358 = 1328,1381
+++++---	+---+---	-----	+---+---	1358,1380 = 1380,1381
+++++---	+---+---	-----	+---+---	1358,1361 = 1361,1381

Lot No.: **82E**

Lot-specific information

++++++	++++++	-----	++++++	1351,1358 = 1351,1381
++++++	++++++	-----	++++++	1327,1358 = 1327,1381
++++++	++++++	-----	++++++	130103,1358 = 130103,1381
++++++	++++++	-----	++++++	1358,1379 = 1379,1381
++++++	++++++	-----	++++++	1335,1358 = 1335,1381
++++++	++++++	-----	++++++	1358,1359 = 1359,1381
++++++	++++++	-----	++++++	1301,1358 = 1301,1381
++++++	++++++	-----	++++++	1332,1358 = 1332,1381 = 1340,1358 = 1340,1381
++++++	++++++	-----	++++++	1303,1357 = 1333,1357
++++++	++++++	-----	++++++	1303,1319 = 1319,1333
++++++	++++++	-----	++++++	1304,1333 = 1322,1333
++++++	++++++	-----	++++++	1333,1348 = 1333,1370
++++++	++++++	-----	++++++	1304,1313 = 1313,1322
++++++	++++++	-----	++++++	1313,1348 = 1313,1370
++++++	++++++	-----	++++++	1303,1304 = 1303,1322 = 1304,1337
++++++	++++++	-----	++++++	1304,1312 = 1312,1322
++++++	++++++	-----	++++++	1348,1366 = 1366,1370
++++++	++++++	-----	++++++	1330,1348 = 1330,1370 = 1348,1382
++++++	++++++	-----	++++++	1345,1358 = 1345,1381
++++++	++++++	-----	++++++	1323,1358 = 1323,1381
++++++	++++++	-----	++++++	1303,1348 = 1303,1370 = 1337,1348
++++++	++++++	-----	++++++	1312,1348 = 1312,1370
++++++	++++++	-----	++++++	1338,1358 = 1338,1381
++++++	++++++	-----	++++++	1304,1366 = 1322,1366
++++++	++++++	-----	++++++	1304,1330 = 1304,1382 = 1322,1330
++++++	++++++	-----	++++++	1303,1323 = 1338,1366
++++++	++++++	-----	++++++	1312,1323 = 1330,1338 = 1338,1382
++++++	++++++	-----	++++++	1303,1338 = 1337,1338
++++++	++++++	-----	++++++	1357,1358 = 1357,1381
++++++	++++++	-----	++++++	1319,1358 = 1319,1381
++++++	++++++	-----	++++++	1358,1364 = 1364,1381
++++++	++++++	-----	++++++	1358,1376 = 1376,1381
++++++	++++++	-----	++++++	1358,1383 = 1381,1383
++++++	++++++	-----	++++++	1358,1372 = 1372,1381
++++++	++++++	-----	++++++	1308,1358 = 1308,1381
++++++	++++++	-----	++++++	1304,1358 = 1304,1381 = 1322,1358 = 1322,1381
++++++	++++++	-----	++++++	1348,1358 = 1348,1381 = 1358,1370 = 1370,1381
++++++	++++++	-----	++++++	1316,1358 = 1316,1381
++++++	++++++	-----	++++++	1358,1368 = 1368,1381
++++++	++++++	-----	++++++	1352,1358 = 1352,1381
++++++	++++++	-----	++++++	1306,1333 = 1310,1333
++++++	++++++	-----	++++++	1303,1377 = 1312,1377
++++++	++++++	-----	++++++	1303,1306 = 1303,1310 = 1310,1312
++++++	++++++	-----	++++++	1330,1377 = 1366,1377
++++++	++++++	-----	++++++	1306,1366 = 1310,1330 = 1310,1366
++++++	++++++	-----	++++++	1358,1377 = 1377,1381
++++++	++++++	-----	++++++	1306,1381 = 1310,1358 = 1310,1381
++++++	++++++	-----	++++++	1358,1360 = 1360,1381
++++++	++++++	-----	++++++	1333,1358 = 1333,1381
++++++	++++++	-----	++++++	1330,1381 = 1358,1366 = 1366,1381 = 1381,1382
++++++	++++++	-----	++++++	1303,1358 = 1303,1381 = 1312,1381 = 1337,1358 = 1337,1381
++++++	++++++	-----	++++++	1330,1358 = 1358,1382
++++++	++++++	-----	++++++	1330,1360 = 1360,1366
++++++	++++++	-----	++++++	1303,1360 = 1312,1360

Lot No.: **82E**

Lot-specific information

++++--	+---+--	-----	+-----	1330,1333 = 1333,1366 = 1333,1382
++++--	+---+--	-----	+-----	1303,1333 = 1312,1333 = 1333,1333 = 1333,1337
++++--	+---+--	-+-----	+-----	1303,1313 = 1313,1337
++++--	+---+--	-----	+-----	1303,1330 = 1303,1366 = 1303,1382 = 1312,1366 = 1330,1337 = 1337,1366
++++--	+---+--	-----	+-----	1303,1303 = 1303,1312 = 1303,1337 = 1312,1337
++++--	+---+--	-----	+-----	1330,1366 = 1366,1366 = 1366,1382
++++--	+---+--	-+-----	+-----	1313,1330 = 1313,1382
++++--	+---+--	-+-----	+-----	1312,1313 = 1313,1313
++++--	+---+--	-----	+-----	1312,1330 = 1312,1382
++++--	+---+--	-----	+-----	1330,1330 = 1330,1382
++++--	+---+--	-----	+-----	1358,1381 = 1381,1381
++++++	++++--	-----	-----	1332,1336 = 1332,1365 = 1340,1365
++++++	++++--	-----	+-----	1304,1336 = 1304,1365 = 1322,1365 = 1365,1383
++++++	++++--	-----	+-----	1308,1365 = 1336,1348 = 1348,1365 = 1365,1370
++++++	++++--	-----	+-----	1302,1338 = 1323,1365
++++++	++++--	-----	+-----	1336,1338 = 1338,1365
++++++	++++--	-+-----	-----	1316,1365 = 1365,1374
++++++	++++--	-----	-----	1336,1365 = 1365,1365
++++++	++++--	-----	+-----	1301,1338 = 1338,1369
++++++	++++--	-----	+-----	1332,1338 = 1338,1340
++++++	++++--	-----	-----	1309,1332 = 1320,1332
++++++	++++--	-----	+-----	1304,1353 = 1315,1348 = 1332,1357
++++++	++++--	-----	+-----	1319,1332 = 1348,1353
++++++	++++--	-----	+-----	1301,1348 = 1304,1332 = 1304,1340 = 1322,1332 = 1332,1383 = 1348,1369
++++++	++++--	-----	+-----	1308,1332 = 1332,1348 = 1332,1370 = 1340,1348
++++++	++++--	-----	-----	1332,1332 = 1332,1340
++++++	++++--	-----	+-----	1304,1335 = 1304,1379
++++++	++++--	-----	+-----	1301,1304 = 1304,1369
++++++	++++--	-----	+-----	1338,1352 = 1338,1383
++++++	++++--	-----	+-----	1304,1338 = 1322,1338
++++++	++++--	-----	+-----	1338,1348 = 1338,1370
++++++	++++--	-----	+-----	1304,1319 = 1348,1357
++++++	++++--	-----	+-----	1304,1376 = 1348,1364
++++++	++++--	-----	+-----	1304,1308 = 1348,1352 = 1348,1383
++++++	++++--	-----	+-----	1304,1348 = 1304,1370 = 1322,1348
++++++	++++--	-----	+-----	1348,1348 = 1348,1370
++++++	++++--	-----	+-----	1304,1352 = 1304,1383
++++++	++++--	-----	+-----	1304,1304 = 1304,1322
++++++	++++--	-----	-----	1335,1356 = 1356,1379
++++++	++++--	+-----	-----	1302,1377 = 1331,1377 = 1339,1377
++++++	++++--	+-----	-----	130202,1306 = 130202,1310
++++++	++++--	-+-----	-----	1316,1356 = 1356,1374
++++++	++++--	-----	+-----	1302,1325 = 1329,1382
++++++	++++--	+-----	+-----	130103,1360 = 1328,1360
++++++	++++--	+-----	+-----	1301,1360 = 1360,1380
++++++	++++--	-----	+-----	1325,1327 = 1371,1382
++++++	++++--	-----	+-----	1325,1335 = 1325,1379 = 1378,1382
++++++	++++--	-----	+-----	1325,1359 = 1343,1382
++++++	++++--	-----	+-----	1301,1325 = 1320,1382
++++++	++++--	-----	+-----	1309,1325 = 1309,1382
++++++	++++--	-----	+-----	1335,1382 = 1379,1382
++++++	++++--	+-----	-----	1320,1377 = 1377,1378

Lot No.: **82E**

Lot-specific information

+++++ -+----+ ----- +---+--- 1306,1383 = 1344,1369
+++++ -+----+ +-----++ ---+---+ 130103,1377 = 1328,1377
+++++ -+----+ +-----+--- ---+---+ 1301,1377 = 1335,1377 = 1368,1377 =
1377,1379 = 1377,1380
+++++ -+----+ -----+ +---+--- 1335,1344 = 1344,1379
+++++ -+----+ -----+ ---+---+ 1310,1335 = 1310,1379
+++++ -+----+ -----+ ---+---+ 1306,1335 = 1306,1379
+++++ -+----+ -----+ +---+--- 1301,1344 = 1306,1352
+++++ +++++--- +-----+ +---+--- 1306,1360 = 1310,1360
+++++ +++++--- -----+ +---+--- 1306,1337 = 1310,1337
+++++ -+----+ +-----+--- ---+---+ 1306,1377 = 1310,1377 = 1377,1377
+++++ -+----+ +-----+--- ---+---+ 1306,1310 = 1310,1310
+++++ +++++--- ---+---+ ---+---+ 1320,1374 = 1329,1351
+++++ +++++--- -----+--- ---+---+ 1339,1371 = 1341,1378
+++++ +++++--- -----+--- ---+---+ 1302,1371 = 1320,1341 = 1327,1329 =
1341,1371
+++++ +++++--- -----+--- ---+---+ 130103,1329 = 1320,1334
+++++ +++++--- -----+--- ---+---+ 1302,1378 = 1320,1339 = 1329,1335 =
1329,1379 = 1339,1378
+++++ +++++--- -----+--- ---+---+ 1302,1343 = 1329,1359
+++++ +++++--- -----+--- ---+---+ 1301,1329 = 1302,1320
+++++ +++++--- -----+--- ---+---+ 1302,1309 = 1309,1329
+++++ +---+---+ +-----+--- ---+---+ 130103,130202 = 130202,1328
+++++ +---+---+ +-----+--- ---+---+ 1302,1328 = 1328,1334 = 1334,1380
+++++ +---+---+ +-----+--- ---+---+ 130202,1335 = 130202,1379
+++++ +---+---+ +-----+--- ---+---+ 1301,130202 = 130202,1380
+++++ +---+---+ ---+---+--- ---+---+ 1327,1374 = 1341,1351
+++++ +---+---+ ---+---+--- ---+---+ 130103,1374 = 1334,1351
+++++ +---+---+ ---+---+--- ---+---+ 1335,1374 = 1339,1351 = 1374,1379
+++++ +---+---+ ---+---+--- ---+---+ 1301,1374 = 1302,1351 = 1351,1374
+++++ +---+---+ ---+---+--- ---+---+ 1335,1373 = 1373,1379
+++++ +---+---+ -----+--- ---+---+ 130103,1341 = 1327,1334
+++++ +---+---+ -----+--- ---+---+ 1327,1339 = 1335,1341 = 1341,1379
+++++ +---+---+ -----+--- ---+---+ 1301,1341 = 1302,1327 = 1327,1341
+++++ +---+---+ -----+--- ---+---+ 1331,1335 = 1331,1379
+++++ +---+---+ -----+--- ---+---+ 130103,1339 = 1334,1335 = 1334,1379
+++++ +---+---+ -----+--- ---+---+ 1301,1334 = 130103,1302 = 130103,1334
+++++ +---+---+ -----+--- ---+---+ 1301,1339 = 1302,1335 = 1302,1379 =
1335,1339 = 1339,1379
+++++ ++++++--- -----+--- +---+--- 1308,1329 = 1329,1370
+++++ ++++++--- -----+--- +---+--- 1322,1329 = 1329,1383
+++++ ++++++--- ---+---+--- +---+--- 1308,1374 = 1370,1374
+++++ ++++++--- ---+---+--- +---+--- 1308,1373 = 1370,1373
+++++ ++++++--- -----+---+--- +---+--- 1308,1341 = 1341,1370
+++++ ++++++--- -----+---+--- +---+--- 1308,1331 = 1331,1370
+++++ ++++++--- -----+---+--- +---+--- 1302,1376 = 1308,1334 = 1334,1370 =
1334,1376
+++++ ++++++--- -----+---+--- +---+--- 1308,1339 = 1339,1370
+++++ ++++++--- -----+---+--- +---+--- 1322,1336 = 1336,1383
+++++ ++++++--- -----+---+--- +---+--- 1302,1308 = 1302,1370
+++++ ++++++--- -----+---+--- +---+--- 1308,1336 = 1336,1370
+++++ +---+---+ ---+---+--- +---+--- 1322,1374 = 1374,1383
+++++ +---+---+ ---+---+--- +---+--- 1322,1373 = 1373,1383
+++++ +---+---+ -----+---+--- +---+--- 1322,1341 = 1341,1383
+++++ +---+---+ -----+---+--- +---+--- 1322,1331 = 1331,1383
+++++ +---+---+ -----+---+--- +---+--- 1322,1334 = 1334,1383
+++++ ++++++--- -----+---+--- ---+---+--- 1302,1364 = 1334,1364
+++++ +---+---+ -----+---+--- +---+--- 1322,1339 = 1339,1383
+++++ +---+---+ -----+---+--- +---+--- 1302,1322 = 1302,1383



Lot No.: **82E**

Lot-specific information

++++++	++++++	++++++	++++++	1302,1368 = 1331,1368
++++++	++++++	++++++	++++++	1316,1329 = 1329,1374
++++++	++++++	++++++	++++++	1316,1336 = 1336,1374
++++++	++++++	++++++	++++++	1323,1367 = 1323,1373
++++++	++++++	++++++	++++++	1302,1317 = 1317,1373
++++++	++++++	++++++	++++++	130202,1316 = 130202,1374
++++++	++++++	++++++	++++++	130202,1367 = 130202,1373
++++++	++++++	++++++	++++++	1316,1373 = 1367,1374 = 1373,1374
++++++	++++++	++++++	++++++	1316,1341 = 1341,1374
++++++	++++++	++++++	++++++	1316,1331 = 1331,1374
++++++	++++++	++++++	++++++	1316,1334 = 1334,1374
++++++	++++++	++++++	++++++	1316,1339 = 1339,1374
++++++	++++++	++++++	++++++	1302,1316 = 1302,1374 = 1316,1374 = 1374,1374
++++++	++++++	++++++	++++++	1341,1367 = 1341,1373
++++++	++++++	++++++	++++++	1331,1367 = 1331,1373
++++++	++++++	++++++	++++++	1334,1367 = 1334,1373
++++++	++++++	++++++	++++++	1339,1367 = 1339,1373
++++++	++++++	++++++	++++++	1302,1367 = 1302,1373 = 1367,1373 = 1373,1373
++++++	++++++	++++++	++++++	1302,1341 = 1341,1341
++++++	++++++	++++++	++++++	1302,1331 = 1331,1331
++++++	++++++	++++++	++++++	1302,1334 = 1334,1334
++++++	++++++	++++++	++++++	1302,1339 = 1339,1339
++++++	++++++	++++++	++++++	1308,1367 = 1367,1370
++++++	++++++	++++++	++++++	1322,1367 = 1367,1383
++++++	++++++	++++++	++++++	1320,1345 = 1323,1343
++++++	++++++	++++++	++++++	1335,1345 = 1345,1379
++++++	++++++	++++++	++++++	1323,1335 = 1323,1379
++++++	++++++	++++++	++++++	1301,1345 = 1323,1359 = 1345,1359 = 1345,1369
++++++	++++++	++++++	++++++	1301,1323 = 1323,1369
++++++	++++++	++++++	++++++	1309,1319 = 1319,1320
++++++	++++++	++++++	++++++	1308,1371 = 1370,1371
++++++	++++++	++++++	++++++	1309,1376 = 1320,1376
++++++	++++++	++++++	++++++	1308,1378 = 1370,1378
++++++	++++++	++++++	++++++	1308,1343 = 1309,1372 = 1320,1372 = 1343,1370 = 1343,1372
++++++	++++++	++++++	++++++	1308,1309 = 1308,1320 = 1320,1370
++++++	++++++	++++++	++++++	1309,1353 = 1320,1353
++++++	++++++	++++++	++++++	1309,1340 = 1320,1340
++++++	++++++	++++++	++++++	1309,1357 = 1320,1357
++++++	++++++	++++++	++++++	1322,1371 = 1371,1383
++++++	++++++	++++++	++++++	1309,1364 = 1320,1364
++++++	++++++	++++++	++++++	1322,1378 = 1378,1383
++++++	++++++	++++++	++++++	1322,1343 = 1343,1383
++++++	++++++	++++++	++++++	1309,1383 = 1320,1322 = 1320,1383
++++++	++++++	++++++	++++++	1309,1369 = 1320,1369
++++++	++++++	++++++	++++++	1309,1315 = 1315,1320
++++++	++++++	++++++	++++++	1309,1328 = 1320,1328
++++++	++++++	++++++	++++++	1309,1380 = 1320,1380
++++++	++++++	++++++	++++++	1309,1361 = 1320,1361
++++++	++++++	++++++	++++++	1316,1371 = 1351,1371
++++++	++++++	++++++	++++++	1316,1378 = 1351,1378
++++++	++++++	++++++	++++++	1316,1343 = 1343,1351
++++++	++++++	++++++	++++++	1309,1351 = 1316,1320 = 1320,1351
++++++	++++++	++++++	++++++	1327,1378 = 1335,1371 = 1371,1379
++++++	++++++	++++++	++++++	1327,1343 = 1359,1371

Lot No.: **82E**

Lot-specific information

+++++ -+++++ -+++++ -+++++ 1301,1371 = 1309,1327 = 1309,1371 =
1320,1327 = 1327,1371
+++++ -+++++ -+++++ -+++++ 1309,1368 = 1320,1368
+++++ -+++++ -+++++ -+++++ 130103,1309 = 130103,1320
+++++ -+++++ -+++++ -+++++ 1335,1343 = 1343,1379 = 1359,1378
+++++ -+++++ -+++++ -+++++ 1301,1378 = 1309,1335 = 1309,1378 =
1309,1379 = 1320,1335 = 1320,1379 =
1335,1378 = 1378,1379
+++++ -+++++ -+++++ -+++++ 1309,1352 = 1320,1352
+++++ -+++++ -+++++ -+++++ 1301,1343 = 1309,1343 = 1309,1359 =
1320,1359 = 1343,1359
+++++ -+++++ -+++++ -+++++ 1301,1309 = 1301,1320 = 1309,1320
+++++ -+++++ -+++++ -+++++ 130103,1319 = 1315,1376
+++++ -+++++ -+++++ -+++++ 1315,1372 = 1319,1359
+++++ -+++++ -+++++ -+++++ 1301,1319 = 1308,1315 = 1315,1319 =
1315,1370 = 1319,1369 = 1322,1353 =
1340,1357 = 1353,1357 = 1353,1383
+++++ -+++++ -+++++ -+++++ 1308,1353 = 1319,1340 = 1319,1353 =
1353,1370
+++++ -+++++ -+++++ -+++++ 1308,1328 = 1328,1370 = 1328,1376 =
1376,1380
+++++ -+++++ -+++++ -+++++ 1308,1380 = 1370,1380
+++++ -+++++ -+++++ -+++++ 1308,1361 = 1361,1370
+++++ -+++++ -+++++ -+++++ 1308,1351 = 1351,1370
+++++ -+++++ -+++++ -+++++ 1308,1327 = 1327,1370
+++++ -+++++ -+++++ -+++++ 130103,1372 = 1359,1376
+++++ -+++++ -+++++ -+++++ 1301,1376 = 130103,1308 = 130103,1370 =
130103,1376 = 1369,1376
+++++ -+++++ -+++++ -+++++ 1308,1379 = 1370,1379
+++++ -+++++ -+++++ -+++++ 1308,1335 = 1335,1370
+++++ -+++++ -+++++ -+++++ 1301,1372 = 1308,1359 = 1359,1370 =
1359,1372 = 1369,1372
+++++ -+++++ -+++++ -+++++ 1301,1308 = 1301,1370 = 1308,1369 =
1322,1340 = 1340,1383 = 1369,1370
+++++ -+++++ -+++++ -+++++ 1308,1340 = 1340,1370
+++++ -+++++ -+++++ -+++++ 1301,1353 = 1315,1340 = 1315,1353
+++++ -+++++ -+++++ -+++++ 1340,1353 = 1353,1353
+++++ -+++++ -+++++ -+++++ 1335,1357 = 1357,1379
+++++ -+++++ -+++++ -+++++ 1301,1357 = 1315,1322 = 1315,1357 =
1315,1383 = 1357,1369
+++++ -+++++ -+++++ -+++++ 1322,1328 = 1328,1383
+++++ -+++++ -+++++ -+++++ 1328,1364 = 1328,1369 = 1364,1380
+++++ -+++++ -+++++ -+++++ 1322,1380 = 1380,1383
+++++ -+++++ -+++++ -+++++ 1322,1361 = 1361,1383
+++++ -+++++ -+++++ -+++++ 1322,1351 = 1351,1383
+++++ -+++++ -+++++ -+++++ 1316,1369 = 1351,1369
+++++ -+++++ -+++++ -+++++ 1301,1317 = 1317,1369
+++++ -+++++ -+++++ -+++++ 1322,1327 = 1327,1383
+++++ -+++++ -+++++ -+++++ 1335,1364 = 1364,1379
+++++ -+++++ -+++++ -+++++ 130103,1322 = 130103,1383
+++++ -+++++ -+++++ -+++++ 1301,1364 = 130103,1364 = 130103,1369 =
1364,1369
+++++ -+++++ -+++++ -+++++ 1322,1335 = 1322,1379 = 1335,1383 =
1379,1383
+++++ -+++++ -+++++ -+++++ 1335,1369 = 1369,1379
+++++ -+++++ -+++++ -+++++ 1322,1359 = 1359,1383
+++++ -+++++ -+++++ -+++++ 1301,1322 = 1301,1383 = 1322,1369 =
1352,1369 = 1369,1383
+++++ -+++++ -+++++ -+++++ 1301,1369 = 1369,1369

Lot No.: **82E**

Lot-specific information

+++++ -+----- --+----- ---+---- 1315,1316 = 1315,1351
+++++ -+----- -----+ ---+---- 1315,1335 = 1315,1379
+++++ -+----- -----+ ---+---- 1301,1315 = 1315,1315
+++++ -+----- +-+----- ---+---- 1316,1328 = 1328,1351
+++++ -+----- +-+----- ---+---- 1316,1380 = 1351,1380
+++++ -+----- +-----+ ---+---- 1328,1335 = 1328,1379
+++++ -+----- +-----+ ---+---- 1301,1328 = 130103,1328 = 130103,1380 =
1328,1328 = 1328,1380
+++++ -+----- +-----+ ---+---- 1335,1380 = 1379,1380
+++++ -+----- +-----+ ---+---- 1301,1380 = 1380,1380
+++++ -+----- -+----- ---+---- 1316,1361 = 1351,1361
+++++ -+----- -+----- ---+---- 1335,1361 = 1361,1379
+++++ -+----- -+----- ---+---- 1301,1361 = 1361,1361
+++++ -+----- -+----- ---+---- 1316,1327 = 1327,1351
+++++ -+----- -+----- ---+---- 130103,1316 = 130103,1351
+++++ -+----- -+----- ---+---- 1316,1335 = 1316,1379 = 1335,1351 =
1351,1379
+++++ -+----- --+----- ---+---- 1316,1359 = 1351,1359
+++++ -+----- --+----- ---+---- 1301,1316 = 1301,1351 = 1316,1351 =
1351,1351
+++++ -+----- -----+ ---+---- 1327,1335 = 1327,1379
+++++ -+----- -----+ ---+---- 1301,1327 = 1327,1327
+++++ -+----- -----+ ---+---- 1335,1368 = 1368,1379
+++++ -+----- -----+ ---+---- 130103,1335 = 130103,1379
+++++ -+----- -----+ ---+---- 1301,130103 = 130103,130103
+++++ -+----- -----+ +-+---- 1335,1352 = 1352,1379
+++++ -+----- -----+ ---+---- 1335,1359 = 1359,1379
+++++ -+----- -----+ ---+---- 1301,1335 = 1301,1379 = 1335,1379 =
1379,1379
+++++ -+----- -----+ ---+---- 1301,1359 = 1359,1359
+++++ -+----- -----+ +-+---- 1308,1345 = 1323,1372 = 1345,1372
+++++ -+----- -----+ +-+---- 1345,1352 = 1345,1383
+++++ -+----- -----+ +-+---- 1323,1352 = 1323,1383
+++++ -+----- -----+ +-+---- 1319,1364 = 1357,1376
+++++ -+----- -----+ +-+---- 1308,1357 = 1319,1322 = 1319,1352 =
1319,1357 = 1319,1383 = 1357,1370
+++++ -+----- -----+ +-+---- 1308,1319 = 1319,1319 = 1319,1370
+++++ -+----- -----+ +-+---- 1308,1316 = 1316,1370
+++++ -+----- -----+ +-+---- 1308,1368 = 1368,1370
+++++ -+----- -----+ +-+---- 1308,1364 = 1322,1376 = 1352,1376 =
1364,1370 = 1364,1376 = 1376,1383
+++++ -+----- -----+ +-+---- 1308,1376 = 1370,1376 = 1376,1376
+++++ -+----- -----+ +-+---- 1322,1372 = 1352,1372 = 1372,1383
+++++ -+----- -----+ +-+---- 1308,1322 = 1308,1352 = 1308,1383 =
1352,1370 = 1370,1383
+++++ -+----- -----+ +-+---- 1308,1372 = 1370,1372 = 1372,1372
+++++ -+----- -----+ +-+---- 1308,1308 = 1308,1370
+++++ -+----- -----+ +-+---- 1322,1357 = 1352,1357 = 1357,1357 =
1357,1383
+++++ -+----- -----+ +-+---- 1316,1322 = 1316,1383
+++++ -+----- -----+ +-+---- 1317,1352 = 1317,1383
+++++ -+----- -----+ +-+---- 1322,1368 = 1368,1383
+++++ -+----- -----+ +-+---- 1322,1364 = 1352,1364 = 1364,1383
+++++ -+----- -----+ +-+---- 1322,1352 = 1322,1383 = 1352,1383 =
1383,1383
+++++ -+----- -+----- +-+---- 1324,1355 = 1347,1375 = 1355,1375
+++++ -+----- -+----- +-+---- 1307,1375 = 1324,1349 = 1349,1375
+++++ -+----- -+----- +-+---- 1314,1375 = 1321,1324 = 1321,1375 =
1362,1375

Lot No.: **82E**

Lot-specific information

+++++--	-+-+-+--	-----	+--+--	1311,1375	=	1344,1375	
+++++--	++--+	-+-----	++++--	1318,1349	=	1318,1355	= 1342,1355
+++++--	++--+	-+-----	+--+--	1311,1355	=	1344,1355	
+++++--	++--+	-----	+--+--	1311,1349	=	1344,1349	
+++++--	++-----	-----	+--+--	1311,1321	=	1321,1344	
+++++--	+--+--	-+-----	+--+--	1314,1355	=	1321,1347	= 1321,1355 = 1355,1362
+--+--	+--+--	-+-----	+-----	1307,1355	=	1347,1349	= 1347,1355 = 1349,1355 = 1355,1355
+--+--	+--+--	-----	+--+--	1307,1321	=	1314,1349	= 1321,1349 = 1349,1362
+++++--	+--+--	-----	+-----	1307,1349	=	1349,1349	
+++++--	+-----	-----	+--+--	1314,1321	=	1321,1321	= 1321,1362
+++++--	-+-+-+--	-----	+--+--	1324,1375	=	1375,1375	
+--+++	+--+++	-----	++++--	1311,1363	=	1344,1363	
+--+++	+--+++	-----	-+--	1305,1329	=	1356,1363	
+--+++	+--+++	-----	-+--	1329,1350	=	1329,1362	
+--+++	+--+++	-----	-+--	1305,1363	=	1350,1363	= 1362,1363
+--+++	+--+++	-----	+--+--	1314,1354	=	1346,1354	= 1354,1362
+--+++	+--+++	-----	+--+--	1314,1324	=	1324,1362	
+++++--	-+-+-+--	-----	+--+--	1311,1354	=	1344,1354	
+++++--	-+-+-+--	-----	+--+--	1311,1324	=	1324,1344	
+++++--	++-----	-+-----	-+--+--	1305,1318	=	1318,1350	
+++++--	++-----	-----	-+--+--	1305,1342	=	1342,1350	
+--+++	+--+++	+-----	++++--	1311,1326	=	1326,1344	
+--+++	++-----	-----	++++--	1305,1311	=	1305,1344	
+--+++	++-----	-----	+--+--	1311,1350	=	1344,1350	
+--+++	+--+--	-----	+--+--	1314,1356	=	1325,1350	
+--+++	+--+--	-----	-+--+--	1350,1356	=	1356,1362	
+--+++	+--+++	+-----	-+--+--	1305,1326	=	1326,1350	= 1326,1362
+--+++	+-----	-+-----	-+--+--	1350,1367	=	1362,1367	
+--+++	+-----	-----	-+--+--	1305,1305	=	1305,1350	= 1305,1362
+--+++	+-----	-----	-+--+--	1350,1350	=	1350,1362	
+--+++	+--+--	-+-----	++++--	1307,1318	=	1318,1347	= 1342,1347
+--+++	-+-----	-+-----	++++--	1311,1318	=	1318,1344	
+--+++	-+-----	-+-----	-+--+--	1318,1318	=	1318,1342	
+--+++	-+-----	-----	++++--	1311,1342	=	1342,1344	
+++++--	+--+++	-+-----	+--+--	1311,1347	=	1344,1347	
+++++--	+--+++	-----	+--+--	1307,1311	=	1307,1344	
+++++--	++-----	-----	+--+--	1311,1346	=	1344,1346	
+++++--	++-----	-----	+--+--	1311,1314	=	1311,1362	= 1314,1344 = 1344,1362
+--+++	+--+++	+-----	+--+--	1314,1360	=	1360,1362	
+--+++	+--+++	-----	+--+--	1314,1325	=	1325,1362	
+--+++	+--+++	-+-----	+--+--	1314,1347	=	1347,1362	
+--+++	+--+++	-+-----	+-----	1307,1347	=	1347,1347	
+++++--	+--+++	-----	+--+--	1307,1314	=	1307,1362	
+++++--	+-----	-----	+--+--	1314,1346	=	1346,1346	= 1346,1362
+++++--	+-----	-----	+--+--	1314,1314	=	1314,1362	
+++++--	-+-----	-----	+--+--	1311,1311	=	1311,1344	
+--+++	-+--+++	-----	+--+--	1320,1354	=	1354,1378	
+--+++	-+--+++	-----	+--+--	1324,1354	=	1354,1354	
+--+++	-+--+++	-----	-+--+--	1320,1371	=	1371,1371	
+--+++	-+--+++	-----	-+--+--	1320,1378	=	1378,1378	

1301 = 130101 and 130102
1302 = 130201 and 130203

Lot No.: **82E**

Lot-specific information

SPECIFICITY TABLE

DRB1*13 SSP subtyping

Specificities and sizes of the PCR products of the 32 primer mixes used for DRB1*13 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of contr. band ²	Amplified DRB1*13 alleles ³	Other amplified DRB alleles ^{3,4}
1	175 bp	515 bp	130101-1316, 1318-1342, 1344, 1346-1366, 1368- 1383	030101-030105, 030201- 0307, 0309, 0311-0339, 0820, 1402-140302, 140501-1406, 1409, 1412- 1414, 1417-1421, 142301, 142302 ^{weakly} , 1424, 1427, 1429, 1430, 1433, 1436, 1437, 1440-1445, 1447, 1448, 1451, 1456, 1459, 1463-1465, 1467, 1477
2⁵	200 bp	430 bp	130101-1304, 1306, 1308-1310, 1312, 1313, 1315, 1316, 1319, 1322, 1323, 1327, 1328, 1330-1341, 1345, 1348, 1351-1353, 1357-1359, 1361, 1364-1366, 1368- 1370, 1372, 1373, 1374 ^{weakly} , 1376, 1377, 1379-1383	110201-110202, 111401- 111402, 1116, 1118-1121, 1131, 1145, 1148, 116501-116502, 1416, 1424, 1437, 1463, 1467
3	200 bp	430 bp	130501-130502, 130701-130702, 1311, 131401- 131403, 1318, 1321, 1324, 1326, 1342, 1346, 1347, 1349-135002, 1354, 1355, 1362, 1363, 1375	0820, 110101-110107, 1103-110404, 110601- 110602, 1109-111202, 1115, 1123-1125, 112701- 1129, 1132, 1133, 1135, 1137-1141, 1143, 1144, 1146, 1147, 1149-1151, 115401-1156, 1158-1163, 1166, 1422, 1425, 1427, 1453
4	170 bp	430 bp	130301-1304, 1312, 1313, 1321, 1330, 1332, 1333, 1338, 1348, 1349,	0312, 1413, 1463, 1465

Lot No.: **82E**

Lot-specific information

			1355, 1358, 1365, 1366, 1375, 1381	
5	220 bp	430 bp	130301-130302, 130501-130702, 1310-131403, 1318, 1321, 1325, 1326, 1330, 1333, 1337, 1342, 1344, 1346, 1347, 1349- 135002, 1355, 1356, 1358, 1360, 1362, 1366, 1377, 1381, 1382	0820, 110101-110107, 110401-110404, 110601- 110602, 110801-1110, 111201-1113, 1115, 1117- 111902, 1123-1129, 1131- 1135, 1137-1139, 1142- 1147, 1149, 1150, 1152, 115401-1158, 1160-1162, 1164, 1166, 140101- 140302, 140501-1409, 1412-1414, 1417-142302, 1425-1427, 1429, 1430, 143201-1436, 1438-1445, 1447-1449, 1451, 1453- 1456, 1458-1460, 1462- 1465, 1467, 1469, 1470, 1472, 1474, 1475, 1477
6	215 bp	515 bp	130101-130203, 1304, 1308, 1309, 1315, 1316, 1319, 1320, 1322-1324, 1327-1329, 1331, 1332, 1334-1336, 1338-1341, 1343, 1345, 1348, 1351- 1354, 1357, 1359, 1361, 1363-1365, 1368-1376, 1378- 1380, 1383	110201-1103, 111101- 111102, 111401-111402, 1116, 1120, 1121, 1136, 1140, 1141, 1148, 1155, 1159, 1163, 116501- 116502, 1168, 1416, 1424, 1437
7⁷	190 bp	430 bp	130201-130203, 130501-130502, 1326, 1329, 1331, 1334, 1336, 1339, 1341, 135001- 135002, 1356, 1363, 1365, 1367, 1373, 1374	030201-030202, 030501- 030502, 0309, 0314, 0327, 0329, 0338, 1109, 1120, 1128, 1402-140302, 1409, 1413, 1419, 1424, 1427, 1430, 1446-1448, 1451, 1463, 1467, 1608, DRB3*0108, DRB3*0206, DRB3*0220
8⁷	190 bp	430 bp	130101-130103, 1306, 1309, 1310, 1315, 1318, 1320, 1327, 1328, 1332, 1335, 1340, 1342, 1343, 1351, 1353, 1359, 1361, 1369, 1371, 1377-1380	030101-030106, 0303, 0306-0308, 0310-0313, 0315, 0316, 0318-0320, 0322-0324, 0326, 0328, 0332-0334, 0336, 0337, 0339, 0906, 1116, 1140, 1158, 1159, 1406, 1412, 1417, 1418, 1421, 1429,

Lot No.: **82E**

Lot-specific information

				1433, 1452, 1459, 1464
9	260 bp	430 bp	130201-130302, 130501-130502, 130701- 130702, 1312-131403, 1321, 1323, 1325, 1326, 1329-1331, 1333, 1334, 1336- 1339, 1341, 1345- 1347, 1349- 135002, 1355, 1356, 1360, 1362, 1363, 1365, 1366, 1373, 1374, 1382	030201-030202, 030501- 030502, 0309, 0314, 0317, 0327, 0329, 0335, 0338, 110101-110107, 110801-111202, 111401- 1115, 111901-1120, 1123, 1124, 1126-1129, 1131- 1133, 1137, 1139, 1145, 1149, 1151, 1153, 1161, 1162, 1164, 1166, 1168, 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
10	260 bp	430 bp	130101-130103, 1304, 1306, 1308- 1311, 1315, 1318- 1320, 1322, 1324, 1327, 1328, 1332, 1335, 1340, 1342- 1344, 1348, 1351- 1354, 1357-1359, 1361, 1364, 1368- 1372, 1375-1381, 1383	030101-030106, 0303, 0304, 0306-0308, 0310- 0313, 0315, 0316, 0318- 0326, 0328, 0330-0334, 0336, 0337, 0339, 0820, 110201-110404, 110601- 1107, 1113, 1116-1118, 1121, 1125, 1134-1136, 1138, 1140-1144, 1146- 1148, 1150, 1152, 115401-1160, 1163, 116501-116502, 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
11⁷	205 bp	430 bp	1309, 1320, 1325, 1329, 1343, 1356, 1360, 1371, 1378	110801-110802, 1136, 1142, 1157, 1164, 1168, 140301-140302, 1412, 1424, 1437, 1440, 1469, 1474, 1477
12	215 bp	430 bp	130101-1304, 1308, 1310, 1315,	110103, 110201-1103, 111101-111102, 111401-

Lot No.: **82E**

Lot-specific information

			1316, 1319, 1320, 1322-1324, 1326-1329, 1331-1341, 1343, 1345, 1348, 1351-1354, 1357, 1359-1361, 1363-1366, 1368-1381, 1383	111402, 1116, 111902-1121, 1136, 1140, 1141, 1148, 1159, 1163, 116501-116502, 1168, 1416, 1419, 1421
13	145 bp	515 bp	130301-130302, 130701-1308, 1312, 1313, 1319, 1326, 1332, 1333, 1336-1338, 1340, 1347-1349, 1353, 1355, 1358, 1360, 1365, 1370, 1372, 1376, 1381	030201-0303, 0306, 0317, 0326, 0327, 0331, 0335, 0338, 0820, 1117, 1137, 1141, 1148, 1150, 1152, 1156, 140101-140301, 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
14⁸	145 bp	430 bp	1304, 1308, 1317, 1319, 1322-1324, 1338, 1345, 1348, 1354, 1357, 1364, 1369, 1370, 1372, 1375, 1376, 1383	0402 ^{weakly} , 0414 ^{weakly} , 0437 ^{weakly} , 110201-1103, 111101-111102, 111401-111402, 1121, 1136, 1141, 1148, 1155, 1163, 116501-116502, 1168, 1416, 1457, 1510
15^{6,10}	85, 235 bp	515 bp	1315, 1319, 1326, 1333, 1353, 1357	030101, 030103-0313, 0316, 0318-0323, 0325-0334, 0336-0339, 1107, 112702, 1402-140302, 1406, 1412, 1413, 1418-1420, 1424, 1427, 1429, 1440, 1441, 1447-1449, 1451, 1463, 1467, 1477
16⁷	150 bp	430 bp	130101-130201, 130203, 1308, 1315, 1316, 1319, 1320, 1327-1329, 1331, 1332, 1334-1336, 1339-1341, 1343, 1351-1353, 1357, 1359, 1361, 1363-1365, 1367-1369, 1371-1374, 1376, 1378-1380,	1116, 1120, 1140, 1159, 1416, 1457, 1510

Lot No.: **82E**

Lot-specific information

1383				
17 ¹¹	145, 220, 255 bp	430 bp	130202, 1326, 1328, 1360, 1377, 1380	0316, 110103, 111902
18	230 bp	430 bp	1313, 1318, 1347, 1355, 1361	030102, 030202, 0317, 0324, 0327, 0335, 0820, 1123, 1125, 112701, 1145, 1155, 1164, 140301-140302, 1412, 1427, 1438, 1440, 1447, 1455, 1463, 1467, 1477
19 ^{8,12}	150, 205, 260 bp	430 bp	1316, 1351, 1374	
20 ^{8,9,13}	180, 205, 225 bp	515 bp	1317, 1367, 1373	
21 ⁹	175 bp	430 bp	1327, 1341, 1371	1159
22 ^{6,14}	110, 175 bp	430 bp	1331, 1346, 1354, 1368, 1377	0338, 1124, 1448
23 ^{6,15}	115, 235, 255 bp	430 bp	130103, 1328, 1334, 1364, 1376	110105, 110403, 110602, 1113, 1117, 1152, 115401, 140101, 140103, 140501-140502, 140701-1408, 1414, 1418, 142301-142302, 1426, 143202, 1434-1436, 1439, 1441-144401, 1445, 1454-1456, 1458-1460, 1462, 1464, 1465, 1470, 1472, 1477
24 ¹⁶	145, 180 bp	430 bp	1335, 1339, 1354, 1377-1379	0313, 0338, 1448, 1464
25 ⁶	110 bp	430 bp	130301-1304, 130701-1308, 1311-131403, 1319, 1321-1325, 1330, 1333, 1337, 1338, 1344-1349, 1352, 1354, 1355, 1357, 1358, 1360, 1366, 1370, 1372, 1375, 1376, 1381-1383	0304, 0317, 0321, 0325, 0330, 0331, 0335, 0820, 110101-110404, 110601-110802, 1110-111402, 1117-111902, 1121, 1123, 1125-112702, 1129, 1131-1139, 1141-1143, 1145-1148, 1151-1157, 1160-1166, 1168, 140101-140103, 140501-140503, 140701-1408, 1414, 1416, 1420, 1422-142302, 1425, 1426, 143201-143202, 1434-1440, 1442-1445, 1449, 1453-1456, 1458, 1460, 1462, 1465, 1469,

Lot No.: **82E**

Lot-specific information

26	140 bp	515 bp	130501-130502, 1318, 1326, 1342, 1363	1470, 1472, 1474, 1475 0809, 0821, 1109, 1110, 1140, 1146, 1159, 1162, 1415, 1422, 1427, 1473
27	145 bp	515 bp	130101-130203, 1304-1306, 1309- 1311, 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, 1380 ^{weakly} , 1382, 1383	030101-030106, 0304- 030502, 0307-0315, 0318- 0325, 0328-0330, 0332- 0334, 0336, 0337, 0339, 110101-110106, 110201- 110404, 110601-1116, 1118-1121, 1123-1129, 1131-1136, 1138-1140, 1142-1147, 1149, 1151, 1153-1155, 1157-1166, 1168, 1417, 1421, 1430, 1433, 1435, 1442, 1453, 1464, 1465, 1472
28	160 bp	430 bp	130101-130103, 1304, 1306, 1309- 1311, 1315, 1317, 1318, 1320, 1322, 1324, 1327, 1328, 1335, 1342-1344, 1351, 1352, 1354, 1357, 1359, 1361, 1364, 1368, 1369, 1371, 1375, 1377- 1380, 1383	030101-030106, 0304, 0307, 0308, 0310-0313, 0315, 0316, 0318-0325, 0328, 0330, 0332-0334, 0336, 0337, 0339, 0442, 0459, 0828, 110201- 110404, 110601-1107, 1113, 1116, 1118, 1121, 1125, 1134-1136, 1138, 1140, 1142-1144, 1146, 1147, 115401-1155, 1157- 1160, 1163, 116501- 116502, 1167, 120101- 120202, 120302-1210, 1212-1215, 1417, 1421, 1433, 1435, 1464, 1465, 1472, 150101-150106, 1503-1506, 1509, 1510, 1512, 1513, 1516- 1518, 1520-1525
29⁹	155 bp	430 bp	1315, 1319, 1353, 1357	0832, 120101-120102, 120302-1206, 1208-1211, 1214, 1463, 1467

Lot No.: **82E**

Lot-specific information

30⁶	85 bp	515 bp	130101-130103, 1304, 1308, 1315, 1317, 1319, 1320, 1322, 1324, 1327, 1328, 1332, 1335, 1340, 1343, 1348, 1351-1354, 1357, 1359, 1361, 1364, 1368-1372, 1375, 1376, 1378-1380, 1383	0402, 0437, 110201-1103, 1116, 1121, 1136, 1140, 1141, 1148, 1155, 1159, 1163, 116501-116502, 1416, 1457, 1510
31^{6,17}	75, 170, 205 bp	430 bp	1343, 1345, 1359, 1372	1416
32¹⁸	220, 255 bp	430 bp	130202, 130301- 130302, 1310, 1326, 1333, 1337, 1358, 1360, 1366, 1377, 1381	0320, 110103, 110601- 110602, 111902, 1121, 1147, 1157, 1419, 1421, 1429

¹Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of DRB1*13 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 length 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 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*13 subtyping.

In addition, wells number 6, 13, 15, 20, 26, 27 and 30 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, as well as most DRB1*11 and DRB1*14 alleles are amplified by some of the DRB1*13 primer mixes. In addition, five DRB1*04 alleles, five DRB1*08 alleles, the DRB1*0906 allele, the

Lot No.: **82E**

Lot-specific information

DRB1*12 alleles, most DRB1*15 allele, the DRB1*1608 and the DRB3*0108, the DRB3*0206 and DRB3*0220 alleles are amplified by one or a few of the DRB1*13 primer mixes.

⁵Primer mix 2 may faintly amplify the DRB1*1329 allele.

⁶Specific PCR fragments shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR bands.

⁷Primer mixes 7, 8, 11 and 16 may yield somewhat less intense specific PCR fragments than the other DRB1*13 primer mixes. Most pronounced for primer mix 11.

⁸Primer mixes 14, 19 and 20 may give rise to nonspecific amplifications.

⁹Primer mixes 20, 21 and 29 have a tendency of giving rise to a primer oligomer artifact.

¹⁰Primer mix 15: 85 bp fragment in the DRB1*1315, 1319, 1326, 1353, 1357 and the 030202, 0327, 1402-140302, 1406, 1412, 1413, 1418-1420, 1424, 1427, 1429, 1440, 1441, 1447-1449, 1451, 1463, 1467 and 1477 alleles. 235 bp fragment in the DRB1*1333 and the 030101, 030103-030104, 0304-0313, 0316, 0318-0323, 0325, 0326, 0328, 0330-0333, 1107 and 112702 alleles. 85 and 235 bp fragments in DRB1*030201, 0303 and 0329 alleles, due to primer competition both specific PCR fragments may not be visible.

¹¹Primer mix 17: 145 bp fragment in the DRB1*1377, 1380 and the 0316 alleles. 220 bp fragment in the DRB1*130202, 1326, 1360, the 110103 and 111902 alleles. 255 bp fragment in the DRB1*1328 allele.

¹²Primer mix 19: 150 bp fragment in the DRB1*1351 allele. 205 bp fragment in the DRB1*1374 allele. 260 bp fragment in the DRB1*1316 allele.

¹³Primer mix 20: 180 bp fragment in the DRB1*1317 allele. 205 bp fragment in the DRB1*1373 allele. 225 bp fragment in the DRB1*1367 allele.

¹⁴Primer mix 22: 110 bp fragment in the DRB1*1368 and the 1124 alleles. 175 bp fragment in the DRB1*1331, 1346, 1354, 1377, 0338 and 1448 alleles.

¹⁵Primer mix 23: 115 bp fragment in the DRB1*1334, 1364 and the 1441 alleles. 235 bp fragment in the DRB1*130103, 1376 and the 110105, 110403, 110602, 1113, 1117, 1152, 115401, 140101, 140103, 140501-140502, 140701-1408, 1414, 1418, 142301-142302, 1426, 143202, 1434-1436, 1439, 1442-1445, 1454-1456, 1458-1460, 1462, 1464, 1465, 1470, 1472 and 1477 alleles. 255 bp fragment in the DRB1*1328 allele.

¹⁶Primer mix 24: 145 bp fragment in the DRB1*1335 allele. 180 bp fragment in the DRB1*1339, 1354, 1377 to 1379 and the 0313, 1448 and 1464 alleles.

¹⁷Primer mix 31: Specific PCR fragment of 75 bp in the DRB1*1343, 1345 and the 1416 alleles. Specific PCR fragment of 170 bp in the DRB1*1359 allele. Specific PCR fragment of 205 bp in the DRB1*1372 allele.

¹⁸Primer mix 32: 220 bp fragment in the DRB1*130202-130302, 1310, 1326, 1333, 1337, 1360, 1366, 1377, 1381 and the 110103, 111902, 1419 and 1421 alleles. 255 bp fragment in the DRB1*1358 and the 0320, 110601-110602, 1121, 1147, 1157 and 1429 alleles.

Lot No.: **82E**

Lot-specific information

INTERPRETATION TABLE																
DRB1*13 SSP subtyping																
Amplification patterns of the DRB1*1301 to *1383 alleles																
	Well⁴															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Length of int.	515	430	430	430	430	515	430	430	430	430	430	430	515	430	515	430
pos. control ¹																
5'-primer(s) ²	13	13	13	13	13	13	37	37	13	13	13	13	13	32	13	34
	5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-Ag A ³ 5'-Ag A ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-g TC ³ 5'-TC T ³ 5'-g TC ³ 5'-CAg ³															
							37							34		
							5'-Ag A ³							5'-CAA ³		
														37		
														5'-g TT ³		
3'-primer(s) ³	58	67	67	57	71	71	86	86	86	86	67	71	47	71	28	71
	5'-C gg ³ 5'-gAT ³ 5'-gAA ³ 5'-gCT ³ 5'-CTT ³ 5'-CTC ³ 5'-C AC ³ 5'-C CA ³ 5'-C AC ³ 5'-C CA ³ 5'-gAg ³ 5'-g CT ³ 5'-g gT ³ 5'-CTC ³ 5'-CT C ³ 5'-CTC ³															
	58	67			71	71					67	72			77	
	5'-C Ag ³ 5'-gAT ³				5'-CCT ³ 5'-CgC ³						5'-gAg ³ 5'-gC g ³				5'-A gT ³	
					74						71					
					5'-CAg ³						5'-g Cg ³					
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DRB1 allele																
*130101-130102	1	2				6		8		10		12				16
*130103	1	2				6		8		10		12				16
*130201, 130203	1	2				6	7		9			12				16
*130202	1	2				6	7		9			12				
*130301-130302	1	2		4	5				9			12	13			
*1304	1	2		4		6				10		12		14		
*130501-130502	1		3		5		7		9							
*1306	1	2			5			8		10						
*130701-130702	1		3		5				9				13			
*1308	1	2				6				10		12	13	14		16
*1309	1	2				6		8		10	11					
*1310	1	2			5			8		10		12				
*1311	1		3		5					10						
*1312	1	2		4	5				9				13			
*1313	1	2		4	5				9				13			
*131401-131403	1		3		5				9							
*1315	1	2				6		8		10		12			15	16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

INTERPRETATION TABLE																
DRB1*13 SSP subtyping																
Amplification patterns of the DRB1*1301 to *1383 alleles																
Well ⁴																
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec.
220		205	205		175	235	180							170	255	PCR product
255		260	225			255								205		
430	430	430	515	430	430	430	430	430	515	515	430	430	515	430	430	Length of int.
																pos. control ¹
13	13	13	10	26	13	13	13	13	32	13	47	28	71	16	13	5'-primer(s) ²
5'-g TC ³	5'-g TC ³	5'-g TC ³	5'-g CT ³	5'-g TA ³	5'-g TC ³	5'-g TC ³	5'-g TC ³	5'-g TC ³	5'-TC C ³	5'-g TC ³	5'-g TT ³	5'-g Ag ³	5'-C gA ³	5'-CAA ³	5'-g TC ³	
			16											27		
			5'-gT T ³											5'-C CA ³		
			25											60		
			5'-g CT ³											5'-Ag C ³		
48	74	50	71	71	37	38	48	37	67	47	86	67	86	71	71	3'-primer(s) ³
5'-CCA ³	5'-CAg ³	5'-CAA ³	5'-g CT ³	5'-g CT ³	5'-gTC ³	5'-CAg ³	5'-C CA ³	5'-g AA ³	5'-gAA ³	5'-g gA ³	5'-C CA ³	5'-gAT ³	5'-C CA ³	5'-CTC ³	5'-CTT ³	
72	77	68			57	78	60	37							72	
5'-g Cg ³	5'-TA A ³	5'-C CC ³			5'-C gA ³	5'-CA A ³	5'-A gg ³	5'-g TA ³							5'-gC g ³	
84		86				84		37							85	
5'-CCg ³		5'-C AT ³				5'-CCg ³		5'-g gA ³							5'-C Ag ³	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
																DRB1 allele
										27	28		30			*130101-130102
						23				27	28		30			*130103
										27						*130201, 130203
17										27					32	*130202
								25							32	*130301-130302
								25		27	28		30			*1304
									26	27						*130501-130502
										27	28					*1306
								25								*130701-130702
								25					30			*1308
										27	28					*1309
										27	28				32	*1310
								25		27	28					*1311
								25								*1312
	18							25								*1313
								25		27						*131401-131403
										27	28	29	30			*1315
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1316	1	2				6						12				16
*1317														14		
*1318	1		3		5			8		10						
*1319	1	2				6				10		12	13	14	15	16
*1320	1					6		8		10	11	12				16
*1321	1		3	4	5				9							
*1322	1	2				6				10		12		14		
*1323	1	2				6			9			12		14		
*1324	1		3			6				10		12		14		
*1325	1				5				9		11					
*1326	1		3		5		7		9			12	13		15	
*1327	1	2				6		8		10		12				16
*1328	1	2				6		8		10		12				16
*1329	1					6	7		9		11	12				16
*1330	1	2		4	5				9							
*1331	1	2				6	7		9			12				16
*1332	1	2		4		6		8		10		12	13			16
*1333	1	2		4	5				9			12	13		15	
*1334	1	2				6	7		9			12				16
*1335	1	2				6		8		10		12				16
*1336	1	2				6	7		9			12	13			16
*1337	1	2			5				9			12	13			
*1338	1	2		4		6			9			12	13	14		
*1339	1	2				6	7		9			12				16
*1340	1	2				6		8		10		12	13			16
*1341	1	2				6	7		9			12				16
*1342	1		3		5			8		10						
*1343						6		8		10	11	12				16
*1344	1				5					10						
*1345		2				6			9			12		14		
*1346	1		3		5				9							
*1347	1		3		5				9				13			
*1348	1	2		4		6				10		12	13	14		
*1349	1		3	4	5				9				13			
*135001-135002	1		3		5		7		9							
*1351	1	2				6		8		10		12				16
*1352	1	2				6				10		12				16
*1353	1	2				6		8		10		12	13		15	16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
		19								27						*1316
			20								28		30			*1317
	18								26	27	28					*1318
								25				29	30			*1319
										27	28		30			*1320
								25		27						*1321
								25		27	28		30			*1322
								25		27						*1323
								25		27	28		30			*1324
17								25		27						*1325
									26						32	*1326
				21						27	28		30			*1327
17						23				27	28		30			*1328
										27						*1329
								25		27						*1330
				22						27						*1331
													30			*1332
								25							32	*1333
						23				27						*1334
							24				28		30			*1335
																*1336
								25							32	*1337
								25								*1338
							24			27						*1339
													30			*1340
				21						27						*1341
									26	27	28					*1342
										27	28		30	31		*1343
								25		27	28					*1344
								25		27				31		*1345
					22			25		27						*1346
	18							25								*1347
								25					30			*1348
								25								*1349
										27						*135001-135002
		19								27	28		30			*1351
								25		27	28		30			*1352
												29	30			*1353
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1354	1		3			6				10		12		14		
*1355	1		3	4	5				9				13			
*1356	1				5		7		9		11					
*1357	1	2				6				10		12		14	15	16
*1358	1	2		4	5					10			13			
*1359	1	2				6		8		10		12				16
*1360	1				5				9		11	12	13			
*1361	1	2				6		8		10		12				16
*1362	1		3		5				9							
*1363	1		3			6	7		9			12				16
*1364	1	2				6				10		12		14		16
*1365	1	2		4		6	7		9			12	13			16
*1366	1	2		4	5				9			12				
*1367							7									16
*1368	1	2				6				10		12				16
*1369	1	2				6		8		10		12		14		16
*1370	1	2				6				10		12	13	14		
*1371	1					6		8		10	11	12				16
*1372	1	2				6				10		12	13	14		16
*1373	1	2				6	7		9			12				16
*1374	1	W				6	7		9			12				16
*1375	1		3	4		6				10		12		14		
*1376	1	2				6				10		12	13	14		16
*1377	1	2			5			8		10		12				
*1378	1					6		8		10	11	12				16
*1379	1	2				6		8		10		12				16
*1380	1	2				6		8		10		12				16
*1381	1	2		4	5					10		12	13			
*1382	1	2			5				9							
*1383	1	2				6				10		12		14		16
*030101, 030103- 030105, 0307, 0311, 0318, 0319, 0322, 0323, 0328, 0332- 0334, 0336, 0337, 0339	1							8		10					15	
*030102, 0324	1							8		10						
*030106, 0308, 0310								8		10					15	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
					22		24	25		27	28		30			*1354
	18							25								*1355
										27						*1356
								25		27	28	29	30			*1357
								25							32	*1358
										27	28		30	31		*1359
17								25							32	*1360
	18									27	28		30			*1361
										27						*1362
									26	27						*1363
						23				27	28		30			*1364
																*1365
								25		27					32	*1366
			20													*1367
					22					27	28		30			*1368
										27	28		30			*1369
								25					30			*1370
				21						27	28		30			*1371
								25					30	31		*1372
			20							27						*1373
		19								27						*1374
								25		27	28		30			*1375
						23		25					30			*1376
17					22		24			27	28				32	*1377
							24			27	28		30			*1378
							24			27	28		30			*1379
17										w	28		30			*1380
								25							32	*1381
								25		27						*1382
								25		27	28		30			*1383
										27	28					*030101, 030103- 030105, 0307, 0311, 0318, 0319, 0322, 0323, 0328, 0332- 0334, 0336, 0337, 0339
	18									27	28					*030102, 0324
										27	28					*030106, 0308, 0310
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*030201	1						7		9				13		15	
*030202, 0327	1						7		9				13		15	
*0303, 0306, 0326	1							8		10			13		15	
*0304, 0321, 0325	1									10					15	
*030501-030502, 0309, 0329	1						7		9						15	
*0312	1			4				8		10					15	
*0313	1							8		10					15	
*0314	1						7		9							
*0315	1							8		10						
*0316	1							8		10					15	
*0317	1								9				13			
*0320	1							8		10					15	
*0330	1									10					15	
*0331	1									10			13		15	
*0335	1								9				13			
*0338	1						7		9				13		15	
*0402, 0437														w		
*0414														w		
*0442, 0459, 0828, 1167, 120201- 120202, 1207, 1212, 1213, 1215, 150101- 150106, 1503-1506, 1509, 1512, 1513, 1516-1518, 1520- 1525																
*0809, 0821, 1415																
*0820	1		3		5					10			13			
*0832, 1211																
*0906, 1452								8								
*110101-110102, 110104, 110106, 111201-111202, 1129, 1132, 1133, 1139, 1161, 1166, 1453			3		5					9						
*110103			3		5				9			12				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
	18															*030201
																*030202, 0327
																*0303, 0306, 0326
								25		27	28					*0304, 0321, 0325
										27						*030501-030502, 0309, 0329
										27	28					*0312
							24			27	28					*0313
										27						*0314
17										27	28					*0315
	18										28					*0316
								25								*0317
										27	28				32	*0320
								25		27	28					*0330
								25								*0331
18								25								*0335
				22		24										*0338
													30			*0402, 0437
																*0414
											28					*0442, 0459, 0828, 1167, 120201- 120202, 1207, 1212, 1213, 1215, 150101- 150106, 1503-1506, 1509, 1512, 1513, 1516-1518, 1520- 1525
								26								*0809, 0821, 1415
	18							25								*0820
												29				*0832, 1211
																*0906, 1452
								25		27						*110101-110102, 110104, 110106, 111201-111202, 1129, 1132, 1133, 1139, 1161, 1166, 1453
17								25		27					32	*110103
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*110105			3		5				9							
*110107			3		5				9							
*110201-110202, 116501-116502		2				6				10		12		14		
*1103			3			6				10		12		14		
*110401-110402, 110404, 1135, 1138, 1143, 115402, 1160			3		5					10						
*110403			3		5					10						
*110601, 1147			3		5					10						
*110602			3		5					10						
*1107										10					15	
*110801-110802					5				9		11					
*1109			3		5		7		9							
*1110			3		5				9							
*111101-111102			3			6			9			12		14		
*1113, 1435					5					10						
*111401-111402		2				6			9			12		14		
*1115, 1149			3		5				9							
*1116		2				6		8		10		12				16
*1117, 1152, 140101, 140103, 1408, 1426, 1434, 1439, 1454, 1458, 1460, 1462					5					10			13			
*1118		2			5					10						
*111901, 1131		2			5				9							
*111902		2			5				9			12				
*1120		2				6	7		9			12				16
*1121		2				6				10		12		14		
*1123, 112701			3		5				9							
*1124			3		5				9							
*1125			3		5					10						
*1126					5				9							
*112702			3		5				9						15	
*1128			3		5		7		9							
*1134					5					10						
*1136						6				10	11	12		14		
*1137, 1425			3		5				9				13			
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
						23		25		27						*110105
								25								*110107
								25		27	28		30			*110201-110202, 116501-116502
								25		27	28		30			*1103
								25		27	28					*110401-110402, 110404, 1135, 1138, 1143, 115402, 1160
						23		25		27	28					*110403
								25		27	28				32	*110601, 1147
						23		25		27	28				32	*110602
								25		27	28					*1107
								25		27						*110801-110802
									26	27						*1109
								25	26	27						*1110
								25		27						*111101-111102
						23		25		27	28					*1113, 1435
								25		27						*111401-111402
										27	28					*1115, 1149
										27	28		30			*1116
						23		25								*1117, 1152, 140101, 140103, 1408, 1426, 1434, 1439, 1454, 1458, 1460, 1462
								25		27	28					*1118
								25		27						*111901, 1131
17								25		27					32	*111902
										27						*1120
								25		27	28		30		32	*1121
	18							25		27						*1123, 112701
					22					27						*1124
	18							25		27	28					*1125
								25		27						*1126
								25		27						*112702
										27						*1128
								25		27	28					*1134
								25		27	28		30			*1136
								25								*1137, 1425
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1140			3			6		8		10		12				16
*1141			3			6				10		12	13	14		
*1142					5					10	11					
*1144			3		5					10						
*1145		2			5				9							
*1146			3		5					10						
*1148		2				6				10		12	13	14		
*1150			3		5					10			13			
*1151			3						9							
*1153									9							
*115401			3		5					10						
*1155			3		5	6				10				14		
*1156			3		5					10			13			
*1157					5					10	11					
*1158			3		5			8		10						
*1159			3			6		8		10		12				16
*1162			3		5				9							
*1163			3			6				10		12		14		
*1164					5				9		11					
*1168						6			9		11	12		14		
*120101-120102, 120302-1206, 1208- 1210, 1214																
*140102					5					10			13			
*1402, 1451	1				5		7		9				13		15	
*140301	1				5		7		9		11		13		15	
*140302	1				5		7		9		11				15	
*140501-140502, 142301, 1443, 1445, 1456	1				5					10			13			
*140503	1				5					10			13			
*1406	1				5			8		10			13		15	
*140701-140702					5				9				13			
*1409	1				5		7		9				13			
*1412	1				5			8		10	11		13		15	
*1413	1			4	5		7		9				13		15	
*1414, 1436, 144401	1				5				9				13			
*1416		2				6				10		12	13	14		16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
								26	27	28			30			*1140
								25					30			*1141
								25		27	28					*1142
										27	28					*1144
	18							25		27						*1145
								25	26	27	28					*1146
								25					30			*1148
																*1150
								25		27						*1151
								25		27						*1153
						23		25		27	28					*115401
	18							25		27	28		30			*1155
								25								*1156
								25		27	28				32	*1157
										27	28					*1158
				21					26	27	28		30			*1159
								25	26	27						*1162
								25		27	28		30			*1163
	18							25		27						*1164
								25		27						*1168
											28	29				*120101-120102, 120302-1206, 1208- 1210, 1214
								25								*140102
																*1402, 1451
	18															*140301
	18															*140302
						23		25								*140501-140502, 142301, 1443, 1445, 1456
								25								*140503
																*1406
						23		25								*140701-140702
																*1409
	18															*1412
																*1413
						23		25								*1414, 1436, 144401
								25					30	31		*1416
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*1417, 1433	1				5			8		10						
*1418	1				5			8		10			13		15	
*1419	1				5		7		9			12	13		15	
*1420	1				5					10			13		15	
*1421	1				5			8		10		12				
*1422			3		5				9				13			
*142302	W				5					10			13			
*1424	1	2				6	7		9		11		13		15	
*1427	1		3		5		7		9				13		15	
*1429	1				5			8		10			13		15	
*1430	1				5		7		9							
*143201, 1475					5					10			13			
*143202																
*1437	1	2				6				10	11		13			
*1438					5					10			13			
*1440	1				5				9		11		13		15	
*1441	1				5				9				13		15	
*1442	1				5				9							
*144402	1				5				9				13			
*1446, 1608						7										
*1447	1				5		7		9				13		15	
*1448	1				5		7		9				13		15	
*1449					5				9				13		15	
*1455					5					10			13			
*1457														14		16
*1459	1				5			8		10			13			
*1463	1	2		4	5		7		9				13		15	
*1464	1				5			8		10						
*1465	1			4	5					10						
*1467	1	2			5		7		9				13		15	
*1469					5				9		11		13			
*1470					5					10			13			
*1472					5					10						
*1473																
*1474					5					10	11		13			
*1477	1				5				9		11		13		15	
*1510														14		16
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
										27	28					*1417, 1433
						23										*1418
															32	*1419
								25								*1420
										27	28				32	*1421
								25	26							*1422
						23		25								*142302
																*1424
	18								26							*1427
															32	*1429
										27						*1430
								25								*143201, 1475
																*143202
								25								*1437
	18							25								*1438
	18							25								*1440
						23										*1441
						23		25		27						*1442
								25								*144402
																*1446, 1608
	18															*1447
					22		24									*1448
								25								*1449
	18					23		25								*1455
													30			*1457
						23										*1459
	18											29				*1463
						23	24			27	28					*1464
						23		25		27	28					*1465
	18											29				*1467
								25								*1469
						23		25								*1470
						23		25		27	28					*1472
									26							*1473
								25								*1474
	18					23										*1477
											28		30			*1510
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

Lot No.: **82E**

Lot-specific information

Length of spec.	175	200	200	170	220	215	190	190	260	260	205	215	145	145	85	150
PCR product															235	
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DRB3*0108, 0206, 0220							7									
Well No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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*13 subtyping.

In addition, wells number 6, 13, 15, 20, 26, 27 and 30 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.

²The codon, in the 2nd exon, matching the specificity-determining 3'-end of the primer is given. Codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given. Empty spaces indicate codon boundaries.

³The codon, in the 2nd exon, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given. Empty spaces indicate codon boundaries.

Lot No.: **82E**

Lot-specific information

145	230	150	180	175	110	115	145	110	140	145	160	155	85	75	220	Length of spec. PCR product
220		205	205		175	235	180							170	255	
255		260	225			255								205		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.
																DRB3*0108, 0206, 0220
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Well No.

⁴Primer mix 15: 85 bp fragment in the DRB1*1315, 1319, 1326, 1353, 1357 and the 030202, 0327, 1402-140302, 1406, 1412, 1413, 1418-1420, 1424, 1427, 1429, 1440, 1441, 1447-1449, 1451, 1463, 1467 and 1477 alleles. 235 bp fragment in the DRB1*1333 and the 030101, 030103-030104, 0304-0313, 0316, 0318-0323, 0325, 0326, 0328, 0330-0333, 1107 and 112702 alleles. 85 and 235 bp fragments in DRB1*030201, 0303 and 0329 alleles, due to primer competition both specific PCR fragments may not be visible.

Primer mix 17: 145 bp fragment in the DRB1*1377, 1380 and the 0316 alleles. 220 bp fragment in the DRB1*130202, 1326, 1360, the 110103 and 111902 alleles. 255 bp fragment in the DRB1*1328 allele.

Primer mix 19: 150 bp fragment in the DRB1*1351 allele. 205 bp fragment in the DRB1*1374 allele. 260 bp fragment in the DRB1*1316 allele.

Primer mix 20: 180 bp fragment in the DRB1*1317 allele. 205 bp fragment in the DRB1*1373 allele. 225 bp fragment in the DRB1*1367 allele.

Primer mix 22: 110 bp fragment in the DRB1*1368 and the 1124 alleles. 175 bp fragment in the DRB1*1331, 1346, 1354, 1377, 0338 and 1448 alleles.

Primer mix 23: 115 bp fragment in the DRB1*1334, 1364 and the 1441 alleles. 235 bp fragment in the DRB1*130103, 1376 and the 110105, 110403, 110602, 1113, 1117, 1152, 115401, 140101, 140103, 140501-140502, 140701-1408, 1414, 1418, 142301-142302, 1426, 143202, 1434-1436, 1439, 1442-1445, 1454-1456, 1458-1460, 1462, 1464, 1465, 1470, 1472 and 1477 alleles. 255 bp fragment in the DRB1*1328 allele.

Primer mix 24: 145 bp fragment in the DRB1*1335 allele. 180 bp fragment in the DRB1*1339, 1354, 1377 to 1379 and the 0313, 1448 and 1464 alleles.

Primer mix 31: Specific PCR fragment of 75 bp in the DRB1*1343, 1345 and the 1416 alleles. Specific PCR fragment of 170 bp in the DRB1*1359 allele. Specific PCR fragment of 205 bp in the DRB1*1372 allele.

Primer mix 32: 220 bp fragment in the DRB1*130202-130302, 1310, 1326, 1333, 1337, 1360, 1366, 1377, 1381 and the 110103, 111902, 1419 and 1421 alleles. 255 bp fragment in the DRB1*1358 and the 0320, 110601-110602, 1121, 1147, 1157 and 1429 alleles.

'w', may be weakly amplified.

Lot No.: **82E**

Lot-specific information

CELL LINE VALIDATION SHEET																				
DRB1*13 SSP subtyping kit																				
				Well																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				Prod. No.:	200622401	200848602	200622403	200622404	200622405	200622406	200622407	200622408	200622409	200622410	200848611	200622412	200622413	200622414	200622415	200622416
	IHWC cell line		DRB1																	
1	9001 SA		*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9002 MZ0707082		*0102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9010 AMAI		*1503		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9016 RML		*1602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020 QBL		*0301		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
8	9025 DEU		*0401		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026 YAR		*0402		-	-	-	-	-	-	-	-	-	-	-	-	f	-	-	-
10	9107 LKT3		*0405		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051 PITOUT		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052 DBB		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9067 BTB		*0801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA		*08022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*09012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9036 SPO010		*1101		-	-	+	-	+	-	-	+	-	-	-	-	-	-	-	-
17	9039 JVM		*1102		-	+	-	-	-	+	-	-	+	-	+	-	-	+	-	-
18	9089 BOB		*1104		-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
19	9038 BM16		*1201		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059 SLE005		*1302		+	+	-	-	-	+	+	-	+	-	-	+	-	-	-	+
21	9064 AMALA		*1402		+	-	-	-	+	-	+	-	+	-	-	+	-	+	-	-
22	9056 KOSE		*1302	*1401	+	+	-	-	+	+	+	-	+	+	-	+	+	-	-	+
23	9061 31227ABO		*1401		-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
24	9035 JBUSH		*1101		-	-	+	-	+	-	-	+	-	-	-	-	-	-	-	-
25	9049 IBW9		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*0301		+	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-
27	MAM		*0101	*0102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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		*08032		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*1401		-	-	-	-	+	-	-	-	+	-	-	+	-	-	-	-
45	9058 OMV		*1301		+	+	-	-	-	+	+	-	+	-	+	-	-	-	-	+
46	9013 SCHU		*1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045 TUBO		*1104	*1201	-	-	+	-	+	-	-	-	+	-	-	-	-	-	-	-
48	9393 TER-ND		*0103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lot No.: **82E**

Lot-specific information

CELL LINE VALIDATION SHEET																				
DRB1*13 SSP subtyping kit																				
				Well																
				17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
				Prod. No.:	200848617	200622418	200734719	200734720	200734721	200622422	200734723	200622424	200622425	200848626	200622427	200622428	200622429	200622430	200734731	200622432
	IHWC cell line		DRB1																	
1	9001 SA		*0101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9002 MZ0707082		*0102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011 E4181324		*1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9010 AMAI		*1503		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009 KAS011		*1601		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9016 RML		*1602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	9067 BTB		*0801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071 OLGA		*08022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075 DKB		*09012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9036 SPO010		*1101		-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-
17	9039 JVM		*1102		-	-	-	-	-	-	-	-	+	-	+	+	-	+	-	-
18	9089 BOB		*1104		-	-	-	-	-	-	-	-	+	-	+	+	-	-	-	-
19	9038 BM16		*1201		-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-
20	9059 SLE005		*1302		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
21	9064 AMALA		*1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056 KOSE		*1302	*1401	-	-	-	-	-	-	+	-	+	+	-	-	-	-	-	-
23	9061 31227ABO		*1401		-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-
24	9035 JBUSH		*1101		-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-
25	9049 IBW9		*0701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285 WT49		*0301		-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-
27	MAM		*0101	*0102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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		*08032		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076 T7526		*0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057 TEM		*1401		-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-
45	9058 OMV		*1301		-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-
46	9013 SCHU		*1501		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
47	9045 TUBO		*1104	*1201	-	-	-	-	-	-	-	-	+	-	+	+	+	-	-	-
48	9393 TER-ND		*0103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lot No.: **82E**

Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP[®] DRB1*13 SSP

Product number: 101.116-24u/03u – without Taq pol.
Lot number: 82E
Expiry date: 2010-June-01
Number of tests: 24 tests – Product No. 101.116-24u
3 tests – Product No. 101.116-03u
Number of wells per test: 32

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2006-224-01	13	2006-224-13	25	2006-224-25
2	2008-486-02	14	2006-224-14	26	2008-486-26
3	2006-224-03	15	2005-224-15	27	2006-224-27
4	2006-224-04	16	2006-224-16	28	2006-224-28
5	2006-224-05	17	2008-486-17	29	2006-224-29
6	2006-224-06	18	2006-224-18	30	2006-224-30
7	2006-224-07	19	2007-347-19	31	2007-347-31
8	2006-224-08	20	2007-347-20	32	2006-224-32
9	2006-224-09	21	2007-347-21		
10	2006-224-10	22	2006-224-22		
11	2008-486-11	23	2007-347-23		
12	2006-224-12	24	2006-224-24		

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 2, 5 to 7, 11, 12, 14, 17 to 24, 26, 29, 31 and 32 were available. The specificities of the primers in primer solution 11, 17, 18, 20 to 24, 26 and 31 were tested by separately adding one additional 5'-primer or one additional 3'-primer, respectively. . Additional 3'-primers in primer solutions 2, 5, 6, 12 and 32 were tested by separately adding one 5'-primer. Additional 5'-primers in primer solution 7, 14 and 19 were tested by separately adding one 3'-primer. One of the 3'-primers in primer solutions 17 and 24 were not possible to test. In primer solution 19 it was only possible to test the 5'-primer, the 3'-primer was not possible to test. In primer solution 31 one of the 5'-primers was not possible to test.

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

Date of approval: 2009-May-26

Approved by:

Quality Control, Supervisor

Lot No.: **82E**

Lot-specific information

Declaration of Conformity

Product name: *Olerup* SSP® DRB1*13
Product number: 101.116-24u/03u
Lot number: 82E

Intended use: DRB1*13 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 9001:2000 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- May-26

Olle Olerup
Managing Director

Lot No.: **82E**

Lot-specific information

Lot No.: **82E**

Lot-specific information

Lot No.: **82E**

Lot-specific information

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**.