

| Plate 1- Row A |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1354      | 1              | 1                      | 0                   |
| p-umc1566      | 2              | 1                      | 16.5                |
| p-umc1292      | 3              | 1                      | 32.08               |
| p-bnlg1124     | 4              | 1                      | 41.67               |
| p-bnlg1179     | 5              | 1                      | 64.14               |
| p-bnlg1014     | 6              | 1                      | 82.8                |
| p-umc1685      | 7              | 1                      | 103                 |
| p-umc2225      | 8              | 1                      | 124.7               |
| p-bnlg1429     | 9              | 1                      | 143.5               |
| p-umc2226      | 10             | 1                      | 165.8               |
| p-bnlg109      | 11             | 1                      | 188.58              |
| p-umc1073      | 12             | 1                      | 208.5               |

| Plate 1- Row E |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1737      | 1              | 1                      | 1029.96             |
| p-umc1744      | 2              | 1                      | 1051.1              |
| p-bnlg2123     | 3              | 1                      | 1073.46             |
| p-umc1331      | 4              | 1                      | 1096.5              |
| p-umc2100      | 5              | 1                      | 1121.9              |
| p-umc1622      | 6              | 2                      | 2.6                 |
| p-umc1419      | 7              | 2                      | 15.2                |
| p-phi96100     | 8              | 2                      | 28.1                |
| p-umc2363      | 9              | 2                      | 40.2                |
| p-umc1542      | 10             | 2                      | 57.6                |
| p-bnlg1017     | 11             | 2                      | 65.7                |
| p-umc1265      | 12             | 2                      | 77.7                |

| Plate 1- Row B |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1397      | 1              | 1                      | 226.4               |
| p-bnlg2204     | 2              | 1                      | 254.86              |
| p-bnlg2180     | 3              | 1                      | 272.53              |
| p-umc1598      | 4              | 1                      | 290.7               |
| p-bnlg2238     | 5              | 1                      | 326.7               |
| p-umc1472      | 6              | 1                      | 345.85              |
| p-umc1144      | 7              | 1                      | 368.97              |
| p-umc2228      | 8              | 1                      | 391.8               |
| p-umc2025      | 9              | 1                      | 417                 |
| p-umc1461      | 10             | 1                      | 438.8               |
| p-umc1611      | 11             | 1                      | 458.4               |
| p-umc1323      | 12             | 1                      | 483.83              |

| Plate 1- Row F |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1824      | 1              | 2                      | 92.6                |
| p-umc1756      | 2              | 2                      | 141.6               |
| p-umc1262      | 3              | 2                      | 153.1               |
| p-bnlg125      | 4              | 2                      | 164.33              |
| p-mm0231       | 5              | 2                      | 179.4               |
| p-umc1776      | 6              | 2                      | 197.2               |
| p-bnlg2248     | 7              | 2                      | 207.74              |
| p-umc1185      | 8              | 2                      | 216.5               |
| p-bnlg1064     | 9              | 2                      | 227.1               |
| p-phi109642    | 10             | 2                      | 244                 |
| p-umc1026      | 11             | 2                      | 256.05              |
| p-umc1448      | 12             | 2                      | 269.6               |

| Plate 1- Row C |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1812      | 1              | 1                      | 508.2               |
| p-umc2234      | 2              | 1                      | 529                 |
| p-umc2235      | 3              | 1                      | 550                 |
| p-umc1664      | 4              | 1                      | 566.63              |
| p-umc1035      | 5              | 1                      | 587                 |
| p-umc1925      | 6              | 1                      | 606.5               |
| p-umc1374      | 7              | 1                      | 627.1               |
| p-umc1358      | 8              | 1                      | 653.4               |
| p-umc2064      | 9              | 1                      | 678.49              |
| p-bnlg1025     | 10             | 1                      | 700.5               |
| p-umc1245      | 11             | 1                      | 721.9               |
| p-umc1998      | 12             | 1                      | 747.9               |

| Plate 1- Row G |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-phi083       | 1              | 1                      | 284.7               |
| p-umc2249      | 2              | 1                      | 296.3               |
| p-umc1259      | 3              | 1                      | 310.2               |
| p-umc2079      | 4              | 1                      | 320.7               |
| p-umc2007      | 5              | 1                      | 334.2               |
| p-umc1922      | 6              | 1                      | 345.2               |
| p-umc2252      | 7              | 1                      | 359.1               |
| p-umc2253      | 8              | 1                      | 376.1               |
| p-umc2372      | 9              | 1                      | 389.03              |
| p-umc1108      | 10             | 1                      | 401.5               |
| p-umc2129      | 11             | 1                      | 414.1               |
| p-umc1890      | 12             | 1                      | 422.7               |

| Plate 1- Plate D |                |                        |                     |
|------------------|----------------|------------------------|---------------------|
| Gene Name        | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc2080        | 1              | 1                      | 769.4               |
| p-mm0041         | 2              | 1                      | 787.49              |
| p-umc1914        | 3              | 1                      | 809.9               |
| p-umc1715        | 4              | 1                      | 828.29              |
| p-umc1298        | 5              | 1                      | 850.27              |
| p-umc1184        | 6              | 1                      | 873.5               |
| p-umc2189        | 7              | 1                      | 892.2               |
| p-umc1534        | 8              | 1                      | 918.21              |
| p-bnlg1347       | 9              | 1                      | 933.09              |
| p-phi265454      | 10             | 1                      | 973                 |
| p-umc1500        | 11             | 1                      | 985.11              |
| p-umc1553        | 12             | 1                      | 1007.6              |

| Plate 1- Row H |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-mm0271       | 1              | 1                      | 438.3               |
| p-phi251315    | 2              | 1                      | 453.8               |
| p-bnlg2077     | 3              | 1                      | 474.8               |
| p-umc1745      | 4              | 1                      | 485.58              |
| p-umc1126      | 5              | 1                      | 503.61              |
| p-phi435417    | 6              | 1                      | 520.5               |
| p-umc2085      | 7              | 1                      | 544.4               |
| p-umc1992      | 8              | 1                      | 556.21              |
| p-mm0381       | 9              | 1                      | 572.4               |
| p-umc1516      | 10             | 1                      | 584.3               |
| p-umc1256      | 11             | 1                      | 600.7               |
| p-umc1525      | 12             | 1                      | 612.29              |



| Plate 2- Row A |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1736      | 1              | 2                      | 627.98              |
| p-bnlq469      | 2              | 2                      | 650.1               |
| p-umc2184      | 3              | 2                      | 692.4               |
| p-phi101049    | 4              | 2                      | 712.1               |
| p-umc2214      | 5              | 2                      | 728.36              |
| p-umc2118      | 6              | 3                      | 0                   |
| p-umc1780      | 7              | 3                      | 11.2                |
| p-umc2256      | 8              | 3                      | 23.4                |
| p-umc2049      | 9              | 3                      | 38.7                |
| p-umc2377      | 10             | 3                      | 47.91               |
| p-umc1458      | 11             | 3                      | 67.2                |
| p-umc1886      | 12             | 3                      | 78.5                |

| Plate 2- Row E |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-bnlq1496     | 1              | 3                      | 760.9               |
| p-umc1361      | 2              | 3                      | 786.39              |
| p-umc1641      | 3              | 3                      | 806.9               |
| p-umc1010      | 4              | 3                      | 827.4               |
| p-umc2048      | 5              | 3                      | 858.62              |
| p-umc1008      | 6              | 4                      | 2.9                 |
| p-umc2279      | 7              | 4                      | 22.9                |
| p-umc1682      | 8              | 4                      | 47.6                |
| p-umc2409      | 9              | 4                      | 70.05               |
| p-umc2410      | 10             | 4                      | 91.57               |
| p-umc1294      | 11             | 4                      | 108.43              |
| p-bnlq1126     | 12             | 4                      | 135.3               |

| Plate 2- Row B |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1814      | 1              | 3                      | 86.84               |
| p-bnlq1647     | 2              | 3                      | 103.3               |
| p-umc2258      | 3              | 3                      | 127.8               |
| p-umc2259      | 4              | 3                      | 131.7               |
| p-phi036       | 5              | 3                      | 159                 |
| p-umc2158      | 6              | 3                      | 176.6               |
| p-umc1655      | 7              | 3                      | 191.1               |
| p-mmcc0132     | 8              | 3                      | 208.6               |
| p-umc2263      | 9              | 3                      | 227.8               |
| p-umc1223      | 10             | 3                      | 234.4               |
| p-umc1968      | 11             | 3                      | 250.4               |
| p-umc1683      | 12             | 3                      | 266                 |

| Plate 2- Row F |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc2281      | 1              | 4                      | 158.6               |
| p-umc1902      | 2              | 4                      | 181.4               |
| p-umc2039      | 3              | 4                      | 196.4               |
| p-umc1117      | 4              | 4                      | 218.5               |
| p-bnlq490      | 5              | 4                      | 237.8               |
| p-umc2282      | 6              | 4                      | 254.9               |
| p-umc2282      | 7              | 4                      | 271.4               |
| p-umc1175      | 8              | 4                      | 287.3               |
| p-umc1702      | 9              | 4                      | 305.2               |
| p-mmcc0371     | 10             | 4                      | 331.3               |
| p-mmcc0371     | 11             | 4                      | 349.8               |
| p-dupssr16     | 12             | 4                      | 371.71              |

| Plate 2- Row C |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1773      | 1              | 3                      | 280.4               |
| p-phi053       | 2              | 3                      | 296.1               |
| p-bnlq1601     | 3              | 3                      | 306.1               |
| p-umc1501      | 4              | 3                      | 325.4               |
| p-umc1307      | 5              | 3                      | 339.61              |
| p-umc2265      | 6              | 3                      | 354                 |
| p-umc1973      | 7              | 3                      | 371.4               |
| p-umc1539      | 8              | 3                      | 390.3               |
| p-umc1876      | 9              | 3                      | 414.69              |
| p-umc2266      | 10             | 3                      | 434.3               |
| p-bnlq2241     | 11             | 3                      | 454.31              |
| p-umc1644      | 12             | 3                      | 473.1               |

| Plate 2- Row G |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-bnlq2291     | 1              | 4                      | 392.2               |
| p-umc2038      | 2              | 4                      | 411.3               |
| p-umc2038      | 3              | 4                      | 428                 |
| p-umc1775      | 4              | 4                      | 443.2               |
| p-bnlq1444     | 5              | 4                      | 462.5               |
| p-bnlq2162     | 6              | 4                      | 475.7               |
| p-umc2041      | 7              | 4                      | 483.93              |
| p-umc1086      | 8              | 4                      | 500.59              |
| p-umc2285      | 9              | 4                      | 514.9               |
| p-umc2187      | 10             | 4                      | 531.7               |
| p-umc2286      | 11             | 4                      | 553.7               |
| p-umc2139      | 12             | 4                      | 574.8               |

| Plate 2- Row D |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-bnlq1160     | 1              | 3                      | 491.4               |
| p-bnlq197      | 2              | 3                      | 511.5               |
| p-umc2050      | 3              | 3                      | 538.2               |
| p-umc1148      | 4              | 3                      | 552.14              |
| p-umc1404      | 5              | 3                      | 568.3               |
| p-umc1825      | 6              | 3                      | 579.5               |
| p-umc2274      | 7              | 3                      | 608.6               |
| p-umc2081      | 8              | 3                      | 627.1               |
| p-umc2276      | 9              | 3                      | 652.4               |
| p-umc2174      | 10             | 3                      | 683.6               |
| p-umc2152      | 11             | 3                      | 738.7               |
| p-umc2277      | 12             | 3                      | 747.5               |

| Plate 2- Row H |                |                        |                     |
|----------------|----------------|------------------------|---------------------|
| Gene Name      | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1854      | 1              | 4                      | 595.7               |
| p-umc1328      | 2              | 4                      | 618.1               |
| p-umc1573      | 3              | 4                      | 644.3               |
| p-bnlq589      | 4              | 4                      | 670.2               |
| p-umc1109      | 5              | 4                      | 687.8               |
| p-umc2289      | 6              | 4                      | 707.8               |
| p-umc1738      | 7              | 4                      | 720.48              |
| p-umc2290      | 8              | 4                      | 736.7               |
| p-bnlq1890     | 9              | 4                      | 750.2               |
| p-umc1308      | 10             | 5                      | 6.3                 |
| p-umc2291      | 11             | 5                      | 23.3                |
| p-umc1097      | 12             | 5                      | 40.8                |



| Plate 3 - Row A |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1325       | 1              | 5                      | 54.6                |
| p-umc1679       | 2              | 5                      | 71.5                |
| p-umc1365       | 3              | 5                      | 97.95               |
| p-umc2036       | 4              | 5                      | 124.7               |
| p-bnlg565       | 5              | 5                      | 150.9               |
| p-bnlg1879      | 6              | 5                      | 189.8               |
| p-umc1686       | 7              | 5                      | 210.3               |
| p-mmc0351       | 8              | 5                      | 230.4               |
| p-umc2294       | 9              | 5                      | 245.5               |
| p-umc1830       | 10             | 5                      | 266.3               |
| p-umc1429       | 11             | 5                      | 286.6               |
| p-umc2298       | 12             | 5                      | 307                 |

| Plate 3 - Row B |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-bnlg2323      | 1              | 5                      | 328.5               |
| p-umc1349       | 2              | 5                      | 346.5               |
| p-umc1221       | 3              | 5                      | 368.4               |
| p-mmc0081       | 4              | 5                      | 389.9               |
| p-umc1155       | 5              | 5                      | 410.8               |
| p-umc2304       | 6              | 5                      | 428.3               |
| p-bnlg1237      | 7              | 5                      | 454.01              |
| p-umc1019       | 8              | 5                      | 469.6               |
| p-umc1941       | 9              | 5                      | 492.6               |
| p-umc2216       | 10             | 5                      | 518.37              |
| p-phi085        | 11             | 5                      | 528.7               |
| p-umc1537       | 12             | 5                      | 553.61              |

| Plate 3 - Row C |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1375       | 1              | 5                      | 571.66              |
| p-bnlg1118      | 2              | 5                      | 590.4               |
| p-bnlg118       | 3              | 5                      | 609.4               |
| p-umc1792       | 4              | 5                      | 625.8               |
| p-umc1225       | 5              | 5                      | 641.4               |
| p-bnlg389       | 6              | 5                      | 661.56              |
| p-umc1153       | 7              | 5                      | 676.7               |
| p-umc1002       | 8              | 6                      | 9.1                 |
| p-umc2309       | 9              | 6                      | 27.8                |
| p-umc2068       | 10             | 6                      | 47.8                |
| p-umc1753       | 11             | 6                      | 70.37               |
| p-umc2313       | 12             | 6                      | 91.9                |

| Plate 3 - Row D |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1186       | 1              | 6                      | 114.25              |
| p-y1SSR         | 2              | 6                      | 120.5               |
| p-umc1257       | 3              | 6                      | 145.7               |
| p-umc1887       | 4              | 6                      | 166.8               |
| p-umc1796       | 5              | 6                      | 189.5               |
| p-nc010         | 6              | 6                      | 211.5               |
| p-umc2006       | 7              | 6                      | 228.9               |
| p-umc2318       | 8              | 6                      | 244.7               |
| p-umc1250       | 9              | 6                      | 254.5               |
| p-umc1826       | 10             | 6                      | 267.7               |
| p-umc1314       | 11             | 6                      | 284.3               |
| p-umc1379       | 12             | 6                      | 297.1               |

| Plate 3 - Row E |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-bnlg1174      | 1              | 6                      | 315.4               |
| p-umc1020       | 2              | 6                      | 325.9               |
| p-umc2065       | 3              | 6                      | 335.71              |
| p-umc1805       | 4              | 6                      | 346.22              |
| p-bnlg1732      | 5              | 6                      | 373.8               |
| p-umc1912       | 6              | 6                      | 388.7               |
| p-umc2322       | 7              | 6                      | 404.4               |
| p-umc1520       | 8              | 6                      | 414.48              |
| p-umc2170       | 9              | 6                      | 435.1               |
| p-umc2170       | 10             | 6                      | 452.7               |
| p-umc1490       | 11             | 6                      | 466.5               |
| p-umc2323       | 12             | 6                      | 483.5               |

| Plate 3 - Row F |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc2165       | 1              | 6                      | 502.9               |
| p-bnlg1740      | 2              | 6                      | 510.6               |
| p-bnlg1740      | 3              | 6                      | 531.8               |
| p-umc2324       | 4              | 6                      | 544.5               |
| p-umc2177       | 5              | 7                      | 0                   |
| p-umc1241       | 6              | 7                      | 13.8                |
| p-umc1642       | 7              | 7                      | 27.2                |
| p-umc1672       | 8              | 7                      | 43.8                |
| p-bnlg2132      | 9              | 7                      | 53.3                |
| p-umc1840       | 10             | 7                      | 70.67               |
| p-umc1159       | 11             | 7                      | 92                  |
| p-umc1159       | 12             | 7                      | 110.59              |

| Plate 3 - Row G |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc2325       | 1              | 7                      | 127.6               |
| p-umc1401       | 2              | 7                      | 153                 |
| p-umc1927       | 3              | 7                      | 168.5               |
| p-umc1879       | 4              | 7                      | 183.4               |
| p-umc1932       | 5              | 7                      | 204.8               |
| p-umc1339       | 6              | 7                      | 214.12              |
| p-umc1983       | 7              | 7                      | 244.3               |
| p-umc1393       | 8              | 7                      | 258.4               |
| p-bnlg657       | 9              | 7                      | 276.79              |
| p-mmc0411       | 10             | 7                      | 292.7               |
| p-umc1450       | 11             | 7                      | 315.9               |
| p-phi091        | 12             | 7                      | 330.6               |

| Plate 3 - Row H |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1660       | 1              | 7                      | 351.4               |
| p-umc1837       | 2              | 7                      | 368.9               |
| p-bnlg2271      | 3              | 7                      | 383.8               |
| p-umc1936       | 4              | 7                      | 405.5               |
| p-umc1301       | 5              | 7                      | 405.5               |
| p-bnlg1666      | 6              | 7                      | 430.5               |
| p-umc1029       | 7              | 7                      | 444.7               |
| p-umc1543       | 8              | 7                      | 457.44              |
| p-umc1543       | 9              | 7                      | 472.6               |
| p-bnlg2259      | 10             | 7                      | 489.2               |
| p-umc1412       | 11             | 7                      | 518.9               |
| p-phi069        | 12             | 7                      | 545.2               |



| Plate 4 - Row A |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1154       | 1              | 7                      | 558.55              |
| p-bnlg469       | 2              | 7                      | 572.56              |
| p-umc2333       | 3              | 7                      | 593.4               |
| p-phi116        | 4              | 7                      | 611.5               |
| p-umc1786       | 5              | 8                      | 10.58               |
| p-umc2042       | 6              | 8                      | 30.3                |
| p-umc1414       | 7              | 8                      | 48                  |
| p-umc1075       | 8              | 8                      | 59.88               |
| p-umc1483       | 9              | 8                      | 83.1                |
| p-bnlg1194      | 10             | 8                      | 105.4               |
| p-umc1304       | 11             | 8                      | 128.6               |
| p-umc1974       | 12             | 8                      | 153.3               |

| Plate 4 - Row B |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1913       | 1              | 8                      | 160.8               |
| p-umc1530       | 2              | 8                      | 179.5               |
| p-umc2146       | 3              | 8                      | 198.4               |
| p-umc2354       | 4              | 8                      | 216.2               |
| p-umc1984       | 5              | 8                      | 234.8               |
| p-umc1802       | 6              | 8                      | 257.67              |
| p-phi100175     | 7              | 8                      | 274.9               |
| p-umc2154       | 8              | 8                      | 295.3               |
| p-bnlg2046      | 9              | 8                      | 315.2               |
| p-umc1343       | 10             | 8                      | 337.2               |
| p-umc1846       | 11             | 8                      | 357.9               |
| p-umc1340       | 12             | 8                      | 377.7               |

| Plate 4 - Row C |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1824       | 1              | 8                      | 397.86              |
| p-bnlg1152      | 2              | 8                      | 414.1               |
| p-umc1728       | 3              | 8                      | 432.4               |
| p-bnlg1031      | 4              | 8                      | 455.1               |
| p-umc1607       | 5              | 8                      | 466.5               |
| p-bnlg1823      | 6              | 8                      | 483.4               |
| p-bnlg1828      | 7              | 8                      | 506.8               |
| p-umc1005       | 8              | 8                      | 526.6               |
| p-umc1673       | 9              | 8                      | 546.9               |
| p-umc1069       | 10             | 8                      | 571.5               |
| p-umc1663       | 11             | 8                      | 608.1               |
| p-bnlg1131      | 12             | 8                      | 628.2               |

| Plate 3 - Row D |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1957       | 1              | 9                      | 0                   |
| p-umc1370       | 2              | 9                      | 17.7                |
| p-umc1867       | 3              | 9                      | 24.3                |
| p-bnlg1288      | 4              | 9                      | 43.23               |
| p-bnlg1583      | 5              | 9                      | 62.3                |
| p-phi033        | 6              | 9                      | 80.3                |
| p-umc1170       | 7              | 9                      | 101.1               |
| p-umc2336       | 8              | 9                      | 125.7               |
| p-bnlg244       | 9              | 9                      | 142.6               |
| p-bnlg1372      | 10             | 9                      | 155.16              |
| p-umc1698       | 11             | 9                      | 170.4               |
| p-phi022        | 12             | 9                      | 191.7               |

| Plate 4 - Row E |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1586       | 1              | 9                      | 199.7               |
| p-umc2337       | 2              | 9                      | 220.1               |
| p-umc2340       | 3              | 9                      | 238.4               |
| p-umc1267       | 4              | 9                      | 257.6               |
| p-bnlg1209      | 5              | 9                      | 273.2               |
| p-umc1107       | 6              | 9                      | 285.8               |
| p-bnlg1012      | 7              | 9                      | 298                 |
| p-umc2121       | 8              | 9                      | 315.7               |
| p-umc1231       | 9              | 9                      | 342                 |
| p-bnlg1091      | 10             | 9                      | 351.23              |
| p-umc1494       | 11             | 9                      | 373.66              |
| p-umc2343       | 12             | 9                      | 385.3               |

| Plate 4 - Row F |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc2134       | 1              | 9                      | 404.3               |
| p-umc1794       | 2              | 9                      | 420.18              |
| p-umc2346       | 3              | 9                      | 461.6               |
| p-umc1366       | 4              | 9                      | 489.9               |
| p-umc1310       | 5              | 9                      | 517.73              |
| p-phi448880     | 6              | 9                      | 536.8               |
| p-bnlg619       | 7              | 9                      | 554.4               |
| p-umc2347       | 8              | 9                      | 578.6               |
| p-umc1137       | 9              | 9                      | 603.5               |
| p-umc1982       | 10             | 9                      | 633.2               |
| p-umc1380       | 11             | 10                     | 16.6                |
| p-phi041        | 12             | 10                     | 30.9                |

| Plate 4 - Row G |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1291       | 1              | 10                     | 58.76               |
| p-umc2053       | 2              | 10                     | 76.2                |
| p-umc1576       | 3              | 10                     | 97.9                |
| p-umc2034       | 4              | 10                     | 120.1               |
| p-umc1337       | 5              | 10                     | 143.3               |
| p-bnlg1547      | 6              | 10                     | 161.85              |
| p-umc1962       | 7              | 10                     | 180.7               |
| p-umc1345       | 8              | 10                     | 199.5               |
| p-bnlg1712      | 9              | 10                     | 217.8               |
| p-umc2348       | 10             | 10                     | 244.6               |
| p-MZETC34       | 11             | 10                     | 268.1               |
| p-umc1330       | 12             | 10                     | 287.9               |

| Plate 4 - Row H |                |                        |                     |
|-----------------|----------------|------------------------|---------------------|
| Gene Name       | Plate location | Linkage group (chrom.) | Map location (IBMn) |
| p-umc1154       | 1              | 10                     | 308.7               |
| p-bnlg1074      | 2              | 10                     | 332.1               |
| p-umc1506       | 3              | 10                     | 344.8               |
| p-umc1477       | 4              | 10                     | 366.3               |
| p-umc2122       | 5              | 10                     | 392.5               |
| p-bnlg2190      | 6              | 10                     | 412.3               |
| p-umc1196       | 7              | 10                     | 444.8               |
| p-bnlg1839      | 8              | 10                     | 466.4               |
| p-umc1877       | 9              | 10                     | 488.63              |
| p-umc2021       | 10             | 10                     | 505.5               |
| p-umc1038       | 11             | 10                     | 525.11              |
| p-umc1645       | 12             | 10                     | 578.09              |

