

**Ordering FPC contig sequence pseudomolecules based on the map alignments between optical maps  
and the *in silico* maps of the FPC contig sequence pseudomolecules**

| FPC contig<br>Seq Pseudo-<br>molecule | Optical Map<br>Contig | Coordinate On<br>Optical Map<br>(bp) | Coordinate On<br>Optical Map<br>(bp) | Aligned Map<br>Segment Size<br>(bp) | Comments | Anchored<br>Chr No.<br>BACop |
|---------------------------------------|-----------------------|--------------------------------------|--------------------------------------|-------------------------------------|----------|------------------------------|
| ctg48                                 | OMcontig_0            | 796710                               | 2536650                              | 1739940                             |          |                              |
| ctg46                                 | OMcontig_0            | 3148900                              | 14082050                             | 10933150                            |          |                              |
| ctg492                                | OMcontig_0            | 14130030                             | 14535270                             | 405240                              |          |                              |
| ctg45                                 | OMcontig_0            | 14716050                             | 15871390                             | 1155340                             |          |                              |
| ctg44                                 | OMcontig_0            | 16651910                             | 22615680                             | 5963770                             |          |                              |
| ctg43                                 | OMcontig_0            | 30247730                             | 32959800                             | 2712070                             |          |                              |
| ctg42                                 | OMcontig_0            | 34434210                             | 34962240                             | 528030                              |          |                              |
| ctg41                                 | OMcontig_0            | 41383940                             | 43049850                             | 1665910                             |          |                              |
| ctg40                                 | OMcontig_0            | 44199800                             | 45018570                             | 818770                              |          |                              |
| ctg39                                 | OMcontig_0            | 45824670                             | 47406170                             | 1581500                             |          |                              |
| ctg38                                 | OMcontig_0            | 48081620                             | 53687010                             | 5605390                             |          |                              |
| ctg15                                 | OMcontig_0            | 53747710                             | 54649860                             | 902150                              |          |                              |
| ctg37                                 | OMcontig_0            | 54661100                             | 60064050                             | 5402950                             |          |                              |
| ctg36                                 | OMcontig_0            | 60622690                             | 69335470                             | 8712780                             |          |                              |
| ctg33                                 | OMcontig_0            | 69536570                             | 76828150                             | 7291580                             |          |                              |
| ctg709                                | OMcontig_0            | 76866440                             | 77150340                             | 283900                              |          |                              |
| ctg480                                | OMcontig_0            | 77715110                             | 78013010                             | 297900                              |          |                              |
| ctg32                                 | OMcontig_0            | 78458840                             | 83382460                             | 4923620                             |          |                              |
| ctg31                                 | OMcontig_0            | 83552620                             | 89847670                             | 6295050                             |          |                              |
| ctg30                                 | OMcontig_0            | 94560210                             | 95875190                             | 1314980                             |          |                              |
| ctg196                                | OMcontig_1            | 2022750                              | 3329470                              | 1306720                             |          |                              |
| ctg127                                | OMcontig_1            | 6502800                              | 10467970                             | 3965170                             |          |                              |
| ctg195                                | OMcontig_1            | 10953410                             | 12588720                             | 1635310                             |          |                              |
| ctg192                                | OMcontig_1            | 12638860                             | 13825000                             | 1186140                             |          |                              |
| ctg469                                | OMcontig_1            | 14500360                             | 16813060                             | 2312700                             |          |                              |
| ctg193                                | OMcontig_1            | 17643560                             | 23276290                             | 5632730                             |          |                              |
| ctg194                                | OMcontig_1            | 23472460                             | 25840980                             | 2368520                             |          |                              |
| ctg191                                | OMcontig_1            | 26037820                             | 27199480                             | 1161660                             |          |                              |
| ctg188                                | OMcontig_1            | 27719080                             | 34764210                             | 7045130                             |          |                              |
| ctg187                                | OMcontig_1            | 35907890                             | 37601190                             | 1693300                             |          |                              |
| ctg184                                | OMcontig_1            | 39396760                             | 44342740                             | 4945980                             |          |                              |
| ctg182                                | OMcontig_1            | 54412500                             | 57549610                             | 3137110                             |          |                              |
| ctg181                                | OMcontig_1            | 66805390                             | 74057890                             | 7252500                             |          |                              |
| ctg246                                | OMcontig_1            | 74433760                             | 76377300                             | 1943540                             |          |                              |
| ctg179                                | OMcontig_1            | 76684140                             | 84337820                             | 7653680                             |          |                              |
| ctg176                                | OMcontig_1            | 84587610                             | 91644620                             | 7057010                             |          |                              |
| ctg173                                | OMcontig_1            | 93781310                             | 96624000                             | 2842690                             |          |                              |
| ctg316                                | OMcontig_10           | 945058                               | 1553418                              | 608360                              |          |                              |
| ctg315                                | OMcontig_10           | 2616738                              | 5180738                              | 2564000                             |          |                              |
| ctg313                                | OMcontig_10           | 5423598                              | 7751148                              | 2327550                             |          |                              |
| ctg312                                | OMcontig_10           | 9394988                              | 12790008                             | 3395020                             |          |                              |
| ctg311                                | OMcontig_10           | 14227398                             | 15594248                             | 1366850                             |          |                              |
| ctg309                                | OMcontig_10           | 19559638                             | 27227428                             | 7667790                             |          |                              |
| ctg307                                | OMcontig_10           | 29397558                             | 32464938                             | 3067380                             |          |                              |
| ctg306                                | OMcontig_10           | 34195998                             | 40900458                             | 6704460                             |          |                              |
| ctg304                                | OMcontig_10           | 41146318                             | 47480458                             | 6334140                             |          |                              |
| ctg470                                | OMcontig_10           | 47627718                             | 55218978                             | 7591260                             |          |                              |
| ctg459                                | OMcontig_10           | 55448078                             | 57186398                             | 1738320                             |          |                              |
| ctg149                                | OMcontig_11           | 582930                               | 3415270                              | 2832340                             |          |                              |

|        |             |          |          |         |                                    |      |
|--------|-------------|----------|----------|---------|------------------------------------|------|
| ctg147 | OMcontig_11 | 3436890  | 5801860  | 2364970 |                                    |      |
| ctg145 | OMcontig_11 | 7353040  | 11333270 | 3980230 |                                    |      |
| ctg144 | OMcontig_11 | 15753910 | 16063490 | 309580  |                                    |      |
| ctg143 | OMcontig_11 | 17149360 | 17926000 | 776640  |                                    |      |
| ctg142 | OMcontig_11 | 17998830 | 20322670 | 2323840 |                                    |      |
| ctg141 | OMcontig_11 | 20391070 | 20837070 | 446000  |                                    |      |
| ctg141 | OMcontig_11 | 21836920 | 24153650 | 2316730 |                                    |      |
| ctg140 | OMcontig_11 | 24311110 | 25046590 | 735480  |                                    |      |
| ctg138 | OMcontig_11 | 28733280 | 32531810 | 3798530 |                                    |      |
| ctg136 | OMcontig_11 | 39222320 | 39713930 | 491610  |                                    |      |
| ctg135 | OMcontig_11 | 41557850 | 43600430 | 2042580 |                                    |      |
| ctg134 | OMcontig_11 | 43846040 | 45482580 | 1636540 |                                    |      |
| ctg131 | OMcontig_11 | 54249790 | 55049650 | 799860  | bridge between OMcontigs_11 and 12 | chr3 |
| ctg131 | OMcontig_12 | 3492077  | 10672467 | 7180390 | bridge between OMcontigs_11 and 12 | chr3 |
| ctg129 | OMcontig_12 | 11377387 | 14191577 | 2814190 |                                    |      |
| ctg128 | OMcontig_12 | 14223067 | 19409567 | 5186500 |                                    |      |
| ctg126 | OMcontig_12 | 22450927 | 25401967 | 2951040 |                                    |      |
| ctg124 | OMcontig_12 | 30993707 | 32380087 | 1386380 |                                    |      |
| ctg122 | OMcontig_12 | 50113707 | 51290347 | 1176640 |                                    |      |
| ctg118 | OMcontig_13 | 1495080  | 2950290  | 1455210 | bridge between OMcontigs_13 and 46 | chr3 |
| ctg63  | OMcontig_13 | 4310900  | 4881420  | 570520  |                                    |      |
| ctg117 | OMcontig_13 | 19733200 | 22933690 | 3200490 |                                    |      |
| ctg115 | OMcontig_13 | 27874350 | 36349210 | 8474860 |                                    |      |
| ctg113 | OMcontig_13 | 36619940 | 43164560 | 6544620 |                                    |      |
| ctg112 | OMcontig_13 | 43883480 | 44449260 | 565780  |                                    |      |
| ctg111 | OMcontig_13 | 49429160 | 54905300 | 5476140 |                                    |      |
| ctg231 | OMcontig_14 | 183930   | 2333050  | 2149120 | bridge between OMcontigs_14 and 42 | chr5 |
| ctg230 | OMcontig_14 | 2710040  | 3548730  | 838690  |                                    |      |
| ctg494 | OMcontig_14 | 4587740  | 7511050  | 2923310 |                                    |      |
| ctg233 | OMcontig_14 | 7856670  | 10878780 | 3022110 |                                    |      |
| ctg234 | OMcontig_14 | 23921710 | 26521410 | 2599700 |                                    |      |
| ctg399 | OMcontig_14 | 28694760 | 29254770 | 560010  |                                    |      |
| ctg237 | OMcontig_14 | 42812480 | 43968150 | 1155670 |                                    |      |
| ctg238 | OMcontig_14 | 48162520 | 49589030 | 1426510 | bridge between OMcontigs_14 and 25 | chr5 |
| ctg12  | OMcontig_15 | 0        | 2162490  | 2162490 | bridge between OMcontigs_3 and 15  | chr1 |
| ctg10  | OMcontig_15 | 16671420 | 17891530 | 1220110 |                                    |      |
| ctg9   | OMcontig_15 | 21014080 | 26309830 | 5295750 |                                    |      |
| ctg8   | OMcontig_15 | 26918510 | 32663960 | 5745450 |                                    |      |
| ctg6   | OMcontig_15 | 33911980 | 36290240 | 2378260 |                                    |      |
| ctg5   | OMcontig_15 | 37372880 | 39143830 | 1770950 |                                    |      |
| ctg4   | OMcontig_15 | 39933580 | 43980420 | 4046840 |                                    |      |
| ctg2   | OMcontig_15 | 46647900 | 47379100 | 731200  |                                    |      |
| ctg1   | OMcontig_15 | 48424680 | 49505730 | 1081050 |                                    |      |
| ctg326 | OMcontig_16 | 1753700  | 2844230  | 1090530 |                                    |      |
| ctg326 | OMcontig_16 | 11142190 | 11903850 | 761660  |                                    |      |
| ctg327 | OMcontig_16 | 16628040 | 17968400 | 1340360 |                                    |      |
| ctg328 | OMcontig_16 | 18067570 | 19027390 | 959820  |                                    |      |
| ctg329 | OMcontig_16 | 19512710 | 26529450 | 7016740 |                                    |      |
| ctg330 | OMcontig_16 | 27770220 | 32528650 | 4758430 |                                    |      |
| ctg331 | OMcontig_16 | 32779570 | 38277490 | 5497920 |                                    |      |
| ctg334 | OMcontig_16 | 39066410 | 45128560 | 6062150 |                                    |      |
| ctg457 | OMcontig_16 | 45758470 | 47206080 | 1447610 |                                    |      |
| ctg197 | OMcontig_17 | 360720   | 9112640  | 8751920 |                                    |      |
| ctg431 | OMcontig_17 | 9749340  | 10293140 | 543800  |                                    |      |
| ctg376 | OMcontig_17 | 11646990 | 14844440 | 3197450 |                                    |      |
| ctg380 | OMcontig_17 | 33569290 | 35925820 | 2356530 |                                    |      |

|        |             |          |          |         |                                    |       |
|--------|-------------|----------|----------|---------|------------------------------------|-------|
| ctg473 | OMcontig_17 | 37062320 | 37437780 | 375460  |                                    |       |
| ctg707 | OMcontig_17 | 37583420 | 37900910 | 317490  |                                    |       |
| ctg382 | OMcontig_17 | 38918650 | 41399910 | 2481260 |                                    |       |
| ctg383 | OMcontig_17 | 41610250 | 47112880 | 5502630 |                                    |       |
| ctg214 | OMcontig_18 | 0        | 2038710  | 2038710 |                                    |       |
| ctg375 | OMcontig_18 | 5389450  | 8151130  | 2761680 |                                    |       |
| ctg374 | OMcontig_18 | 10338420 | 12008760 | 1670340 |                                    |       |
| ctg367 | OMcontig_18 | 12310110 | 16723470 | 4413360 |                                    |       |
| ctg378 | OMcontig_18 | 17885430 | 18865690 | 980260  |                                    |       |
| ctg377 | OMcontig_18 | 20748860 | 23842390 | 3093530 |                                    |       |
| ctg381 | OMcontig_18 | 25039730 | 26152260 | 1112530 |                                    |       |
| ctg490 | OMcontig_18 | 26265340 | 27294870 | 1029530 |                                    |       |
| ctg373 | OMcontig_18 | 40129480 | 40932400 | 802920  |                                    |       |
| ctg370 | OMcontig_18 | 44439920 | 46653860 | 2213940 |                                    |       |
| ctg52  | OMcontig_19 | 332840   | 3479400  | 3146560 |                                    |       |
| ctg51  | OMcontig_19 | 3858510  | 5218830  | 1360320 |                                    |       |
| ctg54  | OMcontig_19 | 5487970  | 9570280  | 4082310 |                                    |       |
| ctg56  | OMcontig_19 | 17887290 | 18615680 | 728390  |                                    |       |
| ctg60  | OMcontig_19 | 30368050 | 30835900 | 467850  |                                    |       |
| ctg61  | OMcontig_19 | 32521140 | 33948080 | 1426940 |                                    |       |
| ctg62  | OMcontig_19 | 34622340 | 37809280 | 3186940 |                                    |       |
| ctg63  | OMcontig_19 | 38549590 | 44855650 | 6306060 |                                    |       |
| ctg63  | OMcontig_19 | 46132000 | 46863800 | 731800  | bridge between OMcontigs_19 and 61 | chr1  |
| ctg68  | OMcontig_2  | 343300   | 3405540  | 3062240 |                                    |       |
| ctg69  | OMcontig_2  | 5050050  | 6082370  | 1032320 |                                    |       |
| ctg70  | OMcontig_2  | 8156490  | 10748150 | 2591660 |                                    |       |
| ctg71  | OMcontig_2  | 11738630 | 13979510 | 2240880 |                                    |       |
| ctg72  | OMcontig_2  | 14326050 | 16491190 | 2165140 |                                    |       |
| ctg74  | OMcontig_2  | 17503250 | 21302790 | 3799540 |                                    |       |
| ctg76  | OMcontig_2  | 30063410 | 34130320 | 4066910 |                                    |       |
| ctg77  | OMcontig_2  | 34909750 | 41063030 | 6153280 |                                    |       |
| ctg78  | OMcontig_2  | 47334460 | 48336460 | 1002000 |                                    |       |
| ctg79  | OMcontig_2  | 50890180 | 56650270 | 5760090 |                                    |       |
| ctg80  | OMcontig_2  | 62275360 | 64005800 | 1730440 |                                    |       |
| ctg81  | OMcontig_2  | 64316280 | 65620510 | 1304230 |                                    |       |
| ctg451 | OMcontig_2  | 66340140 | 68144840 | 1804700 |                                    |       |
| ctg82  | OMcontig_2  | 73535570 | 74425820 | 890250  |                                    |       |
| ctg302 | OMcontig_2  | 80058920 | 80801290 | 742370  |                                    |       |
| ctg83  | OMcontig_2  | 81781920 | 83324160 | 1542240 |                                    |       |
| ctg426 | OMcontig_2  | 83652300 | 84132010 | 479710  |                                    |       |
| ctg85  | OMcontig_2  | 84372510 | 85034480 | 661970  |                                    |       |
| ctg130 | OMcontig_2  | 85110710 | 87610790 | 2500080 |                                    |       |
| ctg87  | OMcontig_2  | 87701310 | 93541190 | 5839880 |                                    |       |
| ctg293 | OMcontig_20 | 1229000  | 2706580  | 1477580 |                                    |       |
| ctg294 | OMcontig_20 | 3900800  | 4732340  | 831540  |                                    |       |
| ctg487 | OMcontig_20 | 5802020  | 6457260  | 655240  |                                    |       |
| ctg296 | OMcontig_20 | 6535150  | 13975250 | 7440100 |                                    |       |
| ctg297 | OMcontig_20 | 15111380 | 19543150 | 4431770 |                                    |       |
| ctg298 | OMcontig_20 | 21404040 | 23368210 | 1964170 |                                    |       |
| ctg299 | OMcontig_20 | 25472330 | 31042100 | 5569770 | chimeric                           | chr7  |
| ctg300 | OMcontig_20 | 32270490 | 39559900 | 7289410 |                                    |       |
| ctg301 | OMcontig_20 | 39801350 | 42448450 | 2647100 | bridge between OMcontigs_20 and 43 | chr7  |
| ctg84  | OMcontig_21 | 0        | 4473900  | 4473900 | chimeric                           | chr10 |
| ctg398 | OMcontig_21 | 4591900  | 5305250  | 713350  |                                    |       |
| ctg397 | OMcontig_21 | 13850790 | 16326570 | 2475780 |                                    |       |
| ctg395 | OMcontig_21 | 16693110 | 17350320 | 657210  |                                    |       |

|        |             |          |          |          |                                    |      |
|--------|-------------|----------|----------|----------|------------------------------------|------|
| ctg394 | OMcontig_21 | 26095680 | 29224400 | 3128720  |                                    |      |
| ctg393 | OMcontig_21 | 29290290 | 32605290 | 3315000  |                                    |      |
| ctg392 | OMcontig_21 | 35534990 | 40175690 | 4640700  |                                    |      |
| ctg180 | OMcontig_22 | 592130   | 6048360  | 5456230  |                                    |      |
| ctg228 | OMcontig_22 | 6048360  | 10212290 | 4163930  |                                    |      |
| ctg227 | OMcontig_22 | 10935320 | 16154210 | 5218890  |                                    |      |
| ctg225 | OMcontig_22 | 20015620 | 21377270 | 1361650  |                                    |      |
| ctg223 | OMcontig_22 | 35431030 | 35968220 | 537190   | bridge between OMcontigs_7 and 22  | chr5 |
| ctg384 | OMcontig_23 | 1706440  | 3114100  | 1407660  |                                    |      |
| ctg385 | OMcontig_23 | 3557540  | 10145070 | 6587530  |                                    |      |
| ctg386 | OMcontig_23 | 12869520 | 14225110 | 1355590  |                                    |      |
| ctg387 | OMcontig_23 | 14391070 | 19498640 | 5107570  |                                    |      |
| ctg388 | OMcontig_23 | 19987280 | 20981370 | 994090   |                                    |      |
| ctg389 | OMcontig_23 | 21044560 | 26640320 | 5595760  |                                    |      |
| ctg390 | OMcontig_23 | 27573990 | 28895760 | 1321770  |                                    |      |
| ctg391 | OMcontig_23 | 29466260 | 36971370 | 7505110  |                                    |      |
| ctg160 | OMcontig_24 | 191030   | 6728400  | 6537370  |                                    |      |
| ctg531 | OMcontig_24 | 7104460  | 7848020  | 743560   |                                    |      |
| ctg162 | OMcontig_24 | 9586050  | 10352710 | 766660   |                                    |      |
| ctg163 | OMcontig_24 | 11542650 | 14344590 | 2801940  |                                    |      |
| ctg163 | OMcontig_24 | 15119760 | 15534980 | 415220   |                                    |      |
| ctg164 | OMcontig_24 | 22799200 | 23573830 | 774630   |                                    |      |
| ctg238 | OMcontig_25 | 1195600  | 11338910 | 10143310 | bridge between OMcontigs_14 and 25 | chr5 |
| ctg242 | OMcontig_25 | 12678950 | 16586530 | 3907580  |                                    |      |
| ctg244 | OMcontig_25 | 19154770 | 19724700 | 569930   |                                    |      |
| ctg245 | OMcontig_25 | 20109950 | 23896350 | 3786400  |                                    |      |
| ctg247 | OMcontig_25 | 24152690 | 25678800 | 1526110  |                                    |      |
| ctg104 | OMcontig_26 | 5214940  | 6805110  | 1590170  |                                    |      |
| ctg103 | OMcontig_26 | 13196570 | 18169600 | 4973030  |                                    |      |
| ctg103 | OMcontig_26 | 19054960 | 19531060 | 476100   |                                    |      |
| ctg102 | OMcontig_26 | 19677430 | 20587330 | 909900   |                                    |      |
| ctg101 | OMcontig_26 | 21595240 | 22431250 | 836010   |                                    |      |
| ctg99  | OMcontig_26 | 24984680 | 27021540 | 2036860  |                                    |      |
| ctg320 | OMcontig_27 | 5357340  | 6501850  | 1144510  |                                    |      |
| ctg318 | OMcontig_27 | 12974130 | 15564280 | 2590150  |                                    |      |
| ctg318 | OMcontig_27 | 22017340 | 22521230 | 503890   |                                    |      |
| ctg317 | OMcontig_27 | 24465800 | 25296250 | 830450   |                                    |      |
| ctg255 | OMcontig_28 | 10513170 | 11301480 | 788310   |                                    |      |
| ctg121 | OMcontig_28 | 13984010 | 15905090 | 1921080  |                                    |      |
| ctg170 | OMcontig_29 | 1968310  | 3301760  | 1333450  |                                    |      |
| ctg171 | OMcontig_29 | 10275500 | 13293820 | 3018320  |                                    |      |
| ctg437 | OMcontig_3  | 472010   | 1571530  | 1099520  |                                    |      |
| ctg433 | OMcontig_3  | 3235290  | 7695750  | 4460460  |                                    |      |
| ctg471 | OMcontig_3  | 7908150  | 10018740 | 2110590  |                                    |      |
| ctg29  | OMcontig_3  | 10528810 | 17314200 | 6785390  |                                    |      |
| ctg28  | OMcontig_3  | 24097640 | 26283490 | 2185850  |                                    |      |
| ctg27  | OMcontig_3  | 31662120 | 32572420 | 910300   |                                    |      |
| ctg26  | OMcontig_3  | 33259950 | 38881040 | 5621090  |                                    |      |
| ctg24  | OMcontig_3  | 39630030 | 42612170 | 2982140  |                                    |      |
| ctg23  | OMcontig_3  | 43687770 | 47310750 | 3622980  |                                    |      |
| ctg22  | OMcontig_3  | 48272490 | 49355580 | 1083090  |                                    |      |
| ctg20  | OMcontig_3  | 49916720 | 55788960 | 5872240  |                                    |      |
| ctg19  | OMcontig_3  | 57416480 | 58013490 | 597010   |                                    |      |
| ctg18  | OMcontig_3  | 61112160 | 63303440 | 2191280  |                                    |      |
| ctg17  | OMcontig_3  | 65169560 | 65882670 | 713110   |                                    |      |
| ctg16  | OMcontig_3  | 66135490 | 68003030 | 1867540  |                                    |      |

|        |             |          |          |         |                                    |       |
|--------|-------------|----------|----------|---------|------------------------------------|-------|
| ctg474 | OMcontig_3  | 68064950 | 68621150 | 556200  |                                    |       |
| ctg445 | OMcontig_3  | 69447560 | 69791630 | 344070  |                                    |       |
| ctg14  | OMcontig_3  | 80644330 | 82627190 | 1982860 | bridge between OMcontigs_3 and 15  | chr1  |
| ctg12  | OMcontig_3  | 83649280 | 85359450 | 1710170 |                                    |       |
| ctg261 | OMcontig_30 | 2174370  | 3006860  | 832490  |                                    |       |
| ctg262 | OMcontig_30 | 4120240  | 4833130  | 712890  |                                    |       |
| ctg262 | OMcontig_30 | 8603190  | 14897860 | 6294670 | bridge between OMcontigs_30 and 60 | chr6  |
| ctg268 | OMcontig_30 | 16250860 | 18901660 | 2650800 |                                    |       |
| ctg267 | OMcontig_30 | 19777720 | 24163570 | 4385850 |                                    |       |
| ctg322 | OMcontig_31 | 0        | 1365530  | 1365530 |                                    |       |
| ctg322 | OMcontig_31 | 3827560  | 9188580  | 5361020 | bridge between OMcontigs_31 and 68 | chr7  |
| ctg325 | OMcontig_31 | 21179070 | 22250600 | 1071530 |                                    |       |
| ctg501 | OMcontig_31 | 23313050 | 23598030 | 284980  |                                    |       |
| ctg354 | OMcontig_32 | 219530   | 4909730  | 4690200 | bridge between OMcontigs_4 and 32  |       |
| ctg355 | OMcontig_32 | 5094330  | 5763660  | 669330  | bridge between OMcontigs_34 and 36 | chr?  |
| ctg356 | OMcontig_32 | 6833690  | 9364750  | 2531060 |                                    |       |
| ctg358 | OMcontig_32 | 16346700 | 17228360 | 881660  |                                    |       |
| ctg254 | OMcontig_33 | 599730   | 4705530  | 4105800 |                                    |       |
| ctg253 | OMcontig_33 | 4754790  | 9503880  | 4749090 |                                    |       |
| ctg251 | OMcontig_33 | 10698180 | 12199050 | 1500870 |                                    |       |
| ctg250 | OMcontig_33 | 14878610 | 20793700 | 5915090 |                                    |       |
| ctg249 | OMcontig_33 | 21198620 | 22492960 | 1294340 |                                    |       |
| ctg271 | OMcontig_34 | 910700   | 1935920  | 1025220 |                                    |       |
| ctg270 | OMcontig_34 | 7935080  | 10682610 | 2747530 |                                    |       |
| ctg269 | OMcontig_34 | 15282180 | 20735580 | 5453400 |                                    |       |
| ctg366 | OMcontig_35 | 772330   | 3688600  | 2916270 |                                    |       |
| ctg365 | OMcontig_35 | 3812410  | 4129860  | 317450  |                                    |       |
| ctg364 | OMcontig_35 | 4165030  | 5807280  | 1642250 |                                    |       |
| ctg363 | OMcontig_35 | 7115000  | 11062630 | 3947630 |                                    |       |
| ctg362 | OMcontig_35 | 11625950 | 15347760 | 3721810 |                                    |       |
| ctg360 | OMcontig_35 | 15491120 | 19129260 | 3638140 |                                    |       |
| ctg269 | OMcontig_36 | 66710    | 5021400  | 4954690 | bridge between OMcontigs_34 and 36 |       |
| ctg442 | OMcontig_36 | 5112110  | 6427230  | 1315120 |                                    |       |
| ctg265 | OMcontig_36 | 7974930  | 10370510 | 2395580 | bridge between OMcontigs_37 and 45 | chr10 |
| ctg401 | OMcontig_37 | 339550   | 827110   | 487560  |                                    |       |
| ctg400 | OMcontig_37 | 8507210  | 10152920 | 1645710 |                                    |       |
| ctg399 | OMcontig_37 | 10949170 | 18143530 | 7194360 |                                    |       |
| ctg399 | OMcontig_37 | 19280850 | 19962360 | 681510  | bridge between OMcontigs_4 and 32  |       |
| ctg199 | OMcontig_38 | 431650   | 6131320  | 5699670 |                                    |       |
| ctg198 | OMcontig_38 | 6285160  | 8084860  | 1799700 |                                    |       |
| ctg200 | OMcontig_38 | 8698490  | 10375130 | 1676640 |                                    |       |
| ctg201 | OMcontig_38 | 11623920 | 13775720 | 2151800 |                                    |       |
| ctg202 | OMcontig_38 | 13852420 | 15432800 | 1580380 |                                    |       |
| ctg109 | OMcontig_39 | 2627290  | 6167340  | 3540050 |                                    |       |
| ctg108 | OMcontig_39 | 6222470  | 8097380  | 1874910 |                                    |       |
| ctg354 | OMcontig_4  | 454170   | 8478390  | 8024220 |                                    |       |
| ctg353 | OMcontig_4  | 8862800  | 11117230 | 2254430 |                                    |       |
| ctg352 | OMcontig_4  | 12072640 | 13232960 | 1160320 |                                    |       |
| ctg350 | OMcontig_4  | 13459180 | 17588730 | 4129550 |                                    |       |
| ctg349 | OMcontig_4  | 18301350 | 23411410 | 5110060 |                                    |       |
| ctg348 | OMcontig_4  | 26074450 | 26940420 | 865970  |                                    |       |
| ctg348 | OMcontig_4  | 27439320 | 27995280 | 555960  |                                    |       |
| ctg347 | OMcontig_4  | 29733890 | 30485220 | 751330  |                                    |       |
| ctg346 | OMcontig_4  | 31778350 | 32546820 | 768470  |                                    |       |
| ctg345 | OMcontig_4  | 33470990 | 37772330 | 4301340 |                                    |       |
| ctg340 | OMcontig_4  | 43954560 | 44929360 | 974800  |                                    |       |

|        |             |          |          |         |                                    |         |
|--------|-------------|----------|----------|---------|------------------------------------|---------|
| ctg337 | OMcontig_4  | 47902860 | 48656400 | 753540  |                                    |         |
| ctg338 | OMcontig_4  | 48826370 | 53595020 | 4768650 |                                    |         |
| ctg344 | OMcontig_4  | 53806960 | 60326290 | 6519330 |                                    |         |
| ctg339 | OMcontig_4  | 60531400 | 62443800 | 1912400 |                                    |         |
| ctg336 | OMcontig_4  | 62578740 | 65264320 | 2685580 |                                    |         |
| ctg333 | OMcontig_4  | 72419390 | 75804770 | 3385380 |                                    |         |
| ctg343 | OMcontig_4  | 75916180 | 79375630 | 3459450 |                                    |         |
| ctg332 | OMcontig_4  | 80133560 | 84259980 | 4126420 |                                    |         |
| ctg167 | OMcontig_40 | 7663720  | 12831630 | 5167910 |                                    |         |
| ctg167 | OMcontig_40 | 13495430 | 14714000 | 1218570 |                                    |         |
| ctg86  | OMcontig_41 | 6703900  | 7755290  | 1051390 | bridge between OMcontigs_5 and 41  | chr?    |
| ctg449 | OMcontig_41 | 10020230 | 13145080 | 3124850 |                                    |         |
| ctg231 | OMcontig_42 | 12421300 | 14314230 | 1892930 | bridge between OMcontigs_14 and 42 | chr5    |
| ctg301 | OMcontig_43 | 264420   | 8436320  | 8171900 | bridge between OMcontigs_20 and 43 | chr7    |
| ctg303 | OMcontig_43 | 10320740 | 10989840 | 669100  |                                    |         |
| ctg456 | OMcontig_43 | 11429640 | 12436830 | 1007190 |                                    |         |
| ctg159 | OMcontig_44 | 490310   | 1846670  | 1356360 |                                    |         |
| ctg158 | OMcontig_44 | 2791010  | 5481830  | 2690820 |                                    |         |
| ctg156 | OMcontig_44 | 5880880  | 12714950 | 6834070 |                                    |         |
| ctg401 | OMcontig_45 | 322050   | 4535370  | 4213320 | bridge between OMcontigs_37 and 45 | chr10   |
| ctg402 | OMcontig_45 | 4725850  | 6420790  | 1694940 |                                    |         |
| ctg403 | OMcontig_45 | 7799700  | 10007140 | 2207440 |                                    |         |
| ctg404 | OMcontig_45 | 11159460 | 13043600 | 1884140 |                                    |         |
| ctg118 | OMcontig_46 | 153120   | 1395710  | 1242590 | bridge between OMcontigs_13 and 46 | chr3    |
| ctg119 | OMcontig_46 | 1956150  | 8977020  | 7020870 |                                    |         |
| ctg120 | OMcontig_46 | 11480350 | 11854570 | 374220  |                                    |         |
| ctg149 | OMcontig_47 | 0        | 546350   | 546350  |                                    |         |
| ctg150 | OMcontig_47 | 1005530  | 5993210  | 4987680 |                                    |         |
| ctg151 | OMcontig_47 | 6539160  | 10649220 | 4110060 |                                    |         |
| ctg152 | OMcontig_47 | 11142250 | 12263750 | 1121500 |                                    |         |
| ctg256 | OMcontig_48 | 592170   | 2262870  | 1670700 |                                    |         |
| ctg257 | OMcontig_48 | 3022880  | 5186920  | 2164040 |                                    |         |
| ctg259 | OMcontig_48 | 5923520  | 6423320  | 499800  |                                    |         |
| ctg260 | OMcontig_48 | 8209040  | 10523870 | 2314830 |                                    |         |
| ctg84  | OMcontig_49 | 1733670  | 2160720  | 427050  |                                    |         |
| ctg84  | OMcontig_49 | 2881870  | 10983030 | 8101160 | chimeric                           | chr2    |
| ctg86  | OMcontig_5  | 701600   | 7352670  | 6651070 | bridge between OMcontigs_5 and 41  | chr2    |
| ctg467 | OMcontig_5  | 8354890  | 9570700  | 1215810 |                                    |         |
| ctg89  | OMcontig_5  | 21629270 | 23876260 | 2246990 |                                    |         |
| ctg90  | OMcontig_5  | 53107040 | 58417460 | 5310420 |                                    |         |
| ctg92  | OMcontig_5  | 63218280 | 66783310 | 3565030 |                                    |         |
| ctg95  | OMcontig_5  | 67868650 | 69234940 | 1366290 |                                    |         |
| ctg96  | OMcontig_5  | 69557110 | 74897060 | 5339950 |                                    |         |
| ctg97  | OMcontig_5  | 75715990 | 76287040 | 571050  |                                    |         |
| ctg98  | OMcontig_5  | 76695330 | 83008220 | 6312890 |                                    |         |
| ctg120 | OMcontig_50 | 546900   | 2703370  | 2156470 | bridge between OMcontigs_50 and 57 | chr3    |
| ctg369 | OMcontig_51 | 1619700  | 1953290  | 333590  |                                    |         |
| ctg368 | OMcontig_51 | 2681010  | 6581240  | 3900230 |                                    |         |
| ctg441 | OMcontig_51 | 9547040  | 9943430  | 396390  |                                    |         |
| ctg272 | OMcontig_53 | 2623480  | 4341790  | 1718310 |                                    |         |
| ctg273 | OMcontig_53 | 5870880  | 6899970  | 1029090 |                                    |         |
| ctg448 | OMcontig_55 | 365090   | 3250540  | 2885450 |                                    |         |
| ctg432 | OMcontig_55 | 5086490  | 7978350  | 2891860 | bridge between OMcontigs_55 and 58 | unknown |
| ctg49  | OMcontig_56 | 806320   | 7508590  | 6702270 |                                    |         |
| ctg299 | OMcontig_57 | 362910   | 2580300  | 2217390 | chimeric                           | chr?    |
| ctg120 | OMcontig_57 | 2706020  | 7819050  | 5113030 | bridge between OMcontigs_50 and 57 | chr?    |

|        |             |          |          |         |                                    |      |
|--------|-------------|----------|----------|---------|------------------------------------|------|
| ctg432 | OMcontig_58 | 357983   | 1730798  | 1372815 | bridge between OMcontigs_55 and 58 | chr2 |
| ctg106 | OMcontig_58 | 3242282  | 6165585  | 2923303 |                                    |      |
| ctg50  | OMcontig_59 | 932210   | 5515160  | 4582950 |                                    |      |
| ctg274 | OMcontig_6  | 732580   | 3778830  | 3046250 |                                    |      |
| ctg276 | OMcontig_6  | 4845090  | 7018840  | 2173750 |                                    |      |
| ctg280 | OMcontig_6  | 8871580  | 11981100 | 3109520 |                                    |      |
| ctg477 | OMcontig_6  | 12072580 | 12673340 | 600760  |                                    |      |
| ctg281 | OMcontig_6  | 19003800 | 20788970 | 1785170 |                                    |      |
| ctg282 | OMcontig_6  | 30090450 | 32460570 | 2370120 |                                    |      |
| ctg283 | OMcontig_6  | 33288980 | 40961260 | 7672280 |                                    |      |
| ctg284 | OMcontig_6  | 41818020 | 42918330 | 1100310 |                                    |      |
| ctg285 | OMcontig_6  | 43675540 | 50779370 | 7103830 |                                    |      |
| ctg286 | OMcontig_6  | 50809350 | 51478020 | 668670  |                                    |      |
| ctg287 | OMcontig_6  | 62649620 | 64605930 | 1956310 |                                    |      |
| ctg289 | OMcontig_6  | 65363110 | 68853800 | 3490690 |                                    |      |
| ctg267 | OMcontig_60 | 59840    | 4440020  | 4380180 | bridge between OMcontigs_30 and 60 | chr6 |
| ctg266 | OMcontig_60 | 4958340  | 5526010  | 567670  |                                    |      |
| ctg67  | OMcontig_61 | 626320   | 1468470  | 842150  |                                    |      |
| ctg63  | OMcontig_61 | 2457500  | 5691380  | 3233880 | bridge between OMcontigs_19 and 61 | chr1 |
| ctg106 | OMcontig_64 | 986060   | 4429643  | 3443583 |                                    |      |
| ctg264 | OMcontig_65 | 903488   | 3682295  | 2778807 |                                    |      |
| ctg107 | OMcontig_66 | 428251   | 1336793  | 908542  |                                    |      |
| ctg105 | OMcontig_66 | 1680043  | 2605512  | 925469  |                                    |      |
| ctg263 | OMcontig_67 | 1088547  | 3467200  | 2378653 |                                    |      |
| ctg322 | OMcontig_68 | 656472   | 3258468  | 2601996 | bridge between OMcontigs_31 and 68 | chr7 |
| ctg30  | OMcontig_69 | 2267939  | 2536863  | 268924  |                                    |      |
| ctg204 | OMcontig_7  | 449900   | 5863740  | 5413840 |                                    |      |
| ctg206 | OMcontig_7  | 7487750  | 8450690  | 962940  |                                    |      |
| ctg207 | OMcontig_7  | 11269850 | 11697110 | 427260  |                                    |      |
| ctg209 | OMcontig_7  | 12309300 | 14628620 | 2319320 |                                    |      |
| ctg210 | OMcontig_7  | 15823880 | 17780830 | 1956950 |                                    |      |
| ctg211 | OMcontig_7  | 18805400 | 21232980 | 2427580 |                                    |      |
| ctg212 | OMcontig_7  | 22410610 | 24362880 | 1952270 |                                    |      |
| ctg212 | OMcontig_7  | 26283330 | 29437820 | 3154490 |                                    |      |
| ctg215 | OMcontig_7  | 31544260 | 32123470 | 579210  |                                    |      |
| ctg216 | OMcontig_7  | 32322040 | 32981430 | 659390  |                                    |      |
| ctg217 | OMcontig_7  | 33346600 | 39444800 | 6098200 |                                    |      |
| ctg218 | OMcontig_7  | 39720820 | 46109610 | 6388790 |                                    |      |
| ctg219 | OMcontig_7  | 47668220 | 48466300 | 798080  |                                    |      |
| ctg219 | OMcontig_7  | 49500280 | 56508330 | 7008050 |                                    |      |
| ctg220 | OMcontig_7  | 56552780 | 63849070 | 7296290 |                                    |      |
| ctg223 | OMcontig_7  | 66194760 | 68544060 | 2349300 | bridge between OMcontigs_7 and 22  | chr5 |
| ctg420 | OMcontig_8  | 371700   | 1471030  | 1099330 |                                    |      |
| ctg419 | OMcontig_8  | 2211110  | 4551290  | 2340180 |                                    |      |
| ctg417 | OMcontig_8  | 6397120  | 8823130  | 2426010 |                                    |      |
| ctg414 | OMcontig_8  | 10333980 | 16502860 | 6168880 |                                    |      |
| ctg413 | OMcontig_8  | 17877540 | 18970360 | 1092820 |                                    |      |
| ctg413 | OMcontig_8  | 21664980 | 28191520 | 6526540 |                                    |      |
| ctg412 | OMcontig_8  | 28832650 | 35769130 | 6936480 |                                    |      |
| ctg411 | OMcontig_8  | 46682770 | 48491170 | 1808400 |                                    |      |
| ctg410 | OMcontig_8  | 50018780 | 51596530 | 1577750 |                                    |      |
| ctg409 | OMcontig_8  | 51707550 | 52183780 | 476230  |                                    |      |
| ctg408 | OMcontig_8  | 58642300 | 59160420 | 518120  |                                    |      |
| ctg406 | OMcontig_8  | 61778520 | 63884590 | 2106070 |                                    |      |
| ctg405 | OMcontig_8  | 64484120 | 65635470 | 1151350 |                                    |      |
| ctg427 | OMcontig_9  | 2268846  | 2646426  | 377580  |                                    |      |

|        |            |          |          |         |  |  |
|--------|------------|----------|----------|---------|--|--|
| ctg183 | OMcontig_9 | 4140126  | 4531716  | 391590  |  |  |
| ctg169 | OMcontig_9 | 16426206 | 19107396 | 2681190 |  |  |
| ctg444 | OMcontig_9 | 22224696 | 23453236 | 1228540 |  |  |
| ctg168 | OMcontig_9 | 23766706 | 26508836 | 2742130 |  |  |
| ctg174 | OMcontig_9 | 26625226 | 29671506 | 3046280 |  |  |
| ctg172 | OMcontig_9 | 30016816 | 39159646 | 9142830 |  |  |
| ctg166 | OMcontig_9 | 40206476 | 45539016 | 5332540 |  |  |
| ctg165 | OMcontig_9 | 45704006 | 52288476 | 6584470 |  |  |
| ctg190 | OMcontig_9 | 53563766 | 54244996 | 681230  |  |  |
| ctg435 | OMcontig_9 | 57519056 | 59081076 | 1562020 |  |  |

**Note:** Red letters indicate the FPC contig sequence pseudomolecule was aligned to more than one optical map contig;  
Blue rows indicate the FPC contig sequence pseudomolecules were not originally placed on the maize iMap;  
Yellow rows indicate that the placement of the FPC contig sequence pseudomolecule is inconsistent with the iMap.