Multiple Sequence Alignment

| Position | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |

AT4G16920.2[arabidopsis_thalia
ATGGCGGCAGCTTCTTCTTCTGGCAGCGACATTTTTCCAAGCTTCAGTGGGGAAGATGTTCGCAAGAATTTCCTCAGCCATCTTCTTAAG

AT4G16950.1[arabidopsis_thalia
ATGGCGGCTTCTTCTTCTTCTGGCAGCGACATTTTTCCAAGCTTCAGTGGGGTTGATGTTCGCAAGACGTTCCTCAGCCATCTTC-GAGG

TEdenovo-B-R2288-Map4[repetDB.

| Position | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |

AT4G16920.2[arabidopsis_thalia
CAGCTCAATCGCAGATCAATCAATACATTCATGGATCACGTCATCGAGAGAAGCTGCATAATCGCCGATGCGCTTATATCGGCGATTAGA

AT4G16950.1[arabidopsis_thalia
C-GCTCGACGGCAAATCAATCAATACATTCATCGATCATGGAATCGAGAGAAGCCGCACAATCGCCCCTGAGCTTATATCGGCGATTAGA

TEdenovo-B-R2288-Map4[repetDB.

| Position | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 |

AT4G16920.2[arabidopsis_thalia
GAAGCGAGGATCTCAATTGTCATCTTCTCTAAGAACTATGCTGCTTCCACGTGGTGCTTGAATGAATTGGTTGAAATCGACAATTGCTCT

AT4G16950.1[arabidopsis_thalia
GAAGCTAGGATCTCAATCGTCATCTTCTCTAAGAACTATGCTTCTTCAACGTGGTGCTTAAATGAATTGGTTGAGATCCACAAGTGCTTT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 280 | 290 | 300 | 310 | 320 | 330 | 340 | 350 | 360 |

AT4G16920.2[arabidopsis_thalia
AAATATTTTGGACAAAAGGTGATACCGGTTTTCTACGACGTTGATCCTTCTCATGTTAGAAAACAGATCGGTGAATTTGGAAAGGTCTTT

AT4G16950.1[arabidopsis_thalia
AATGATTTAGGTCAAATGGTGATTCCAGTTTTCTACGACGTTGATCCTTCGGAAGTTAGAAAACAGACCGGCGAATTTGGAAAGGTCTTT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 370 | 380 | 390 | 400 | 410 | 420 | 430 | 440 | 450 |

AT4G16920.2[arabidopsis_thalia
AAAAAGACATGCGAGGACAAACCAGCAGATCAGAAACAAAGATGGGTTAAAGCTCTCACAGATATATCAAATATTGCCGGGGAGGATCTT

AT4G16950.1[arabidopsis_thalia
GAAAAGACATGCGAGGACAAACCACCAGATCAGAAACAAAGATGGGTGCAAGCTCTCACAGATATAGCAAATATAGCCGGAGAGGATCTT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 |

AT4G16920.2[arabidopsis_thalia
CGGAACGGGCCTAATGATGCGCATATGGTTGAAAAGATAGCCAATGATGTTTCGAATAAACTTTTTCATCCGCCAAAGGGTTTTGGTGAC

AT4G16950.1[arabidopsis_thalia
CTGAACGGGCCTAATGAAGCGCATATGGTTGAAAAGATATCCAATGATGTTTCGAATAAACTT-ATCATCGGTCAAAGTGTTTTGATGAC

TEdenovo-B-R2288-Map4[repetDB.

| Position | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 |

AT4G16920.2[arabidopsis_thalia
TTAGTCGGAATTGAAGATCATATAGAGGCAATAAAATCAATACTGTGCTTGGAATCCAAAGAAGCTAAAATAATGGTCGGGATTTGGGGA

AT4G16950.1[arabidopsis_thalia
TTCGTCGGAATTGAAGCTCATATTGAGGCAATAAAATCAGTATTGTGCTTGGAATCCAAGGAAGCT---AGAATGGTCGGGATTTGGGGA

TEdenovo-B-R2288-Map4[repetDB.

| Position | 640 | 650 | 660 | 670 | 680 | 690 | 700 | 710 | 720 |

AT4G16920.2[arabidopsis_thalia
CAGTCAGGGATTGGTAAGAGTACCATAGGAAGAGCTCTTTTCAGTCAACTCTCTAGCCAATTCCCCCTTCGCGCTTTCGTAACTTACAAA

AT4G16950.1[arabidopsis_thalia
CAATCAGGGATTGGTAAGAGTACCATAGGAAGAGCTCTTTTCAGTCAACTCTCTATCCAATTCCCCCTTCGCGCTTTCCTAACTTATAAA

TEdenovo-B-R2288-Map4[repetDB.

| Position | 730 | 740 | 750 | 760 | 770 | 780 | 790 | 800 | 810 |

AT4G16920.2[arabidopsis_thalia
AGCACCAGCGGTAGTGACGTCTCTGGCATGAAGTTGAGTTGGCAAAAAGAACTTCTCTCGGAAATCTTAGGTCAAAAGGACATAAAGATA

AT4G16950.1[arabidopsis_thalia
AGCACCAGTGGTAGTGACGTCTCTGGCATGAAGTTGAGTTGGGAAAAAGAACTTCTCTCTGAAATCTTAGGTCAAAAGGACATAAAGATA

TEdenovo-B-R2288-Map4[repetDB.

| Position | 820 | 830 | 840 | 850 | 860 | 870 | 880 | 890 | 900 |

AT4G16920.2[arabidopsis_thalia
GATCATTTTGGTGTGGTGGAGCAAAGATTAAAGCACAAAAAAGTTCTTATCCTTCTTGATGATGTGGATAATCTAGAGTTTCTTAAGACC

AT4G16950.1[arabidopsis_thalia
GAGCATTTTGGTGTGGTGGAGCAAAGGTTGAAGCACAAGAAAGTTCTTATCCTTCTTGATGATGTGGATAATCTAGAGTTTCTTAAGACC

TEdenovo-B-R2288-Map4[repetDB.

| Position | 910 | 920 | 930 | 940 | 950 | 960 | 970 | 980 | 990 |

AT4G16920.2[arabidopsis_thalia
TTAGTGGGAAAAGCTGAATGGTTTGGATCTGGAAGCAGAATAATTGTGATCACTCAAGATAGGCAACTTCTCAAGGCTCATGAGATTGAC

AT4G16950.1[arabidopsis_thalia
TTGGTGGGAAAAGCTGAATGGTTTGGATCGGGAAGCAGAATTATTGTGATCACTCAAGATAGGCAATTTCTCAAGGCTCATGACATTGAC

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1000 | 1010 | 1020 | 1030 | 1040 | 1050 | 1060 | 1070 | 1080 |

AT4G16920.2[arabidopsis_thalia
CTTGTATATGAGGTGAAGCTGCCATCTCAAGGTCTTGCTCTTCAGATGATATCCCAATATGCTTTTGGGAAAGACTCTCCACCTGATGAT

AT4G16950.1[arabidopsis_thalia
CTTGTATATGAGGTGAAGCTGCCATCTCAAGGTCTTGCTCTTACGATGTTATGCCGATCTGCTTTTGGGAAAGACTCTCCACCTGATGAT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1090 | 1100 | 1110 | 1120 | 1130 | 1140 | 1150 | 1160 | 1170 |

AT4G16920.2[arabidopsis_thalia
TTTAAGGCACTAGCATTTGAAGTTGCCGAGCTTGCTGGTAGTCTTCCTTTGGGTCTCAGTGTCTTGGGTTCATCTCTAAAAGGAAGGGAC

AT4G16950.1[arabidopsis_thalia
TTTAAGGAACTAGCATTTGAAGTTGCGAAGCTTGCCGGCCATCTTCCTTTGGGTCTCAATGTCCTGGGTTCGTCATTAAGAAGAAGGGGC

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1180 | 1190 | 1200 | 1210 | 1220 | 1230 | 1240 | 1250 | 1260 |

AT4G16920.2[arabidopsis_thalia
AAAGATGAGTGGGTGAAGATGATGCCTAGGCTTCGAAATGACTCAGATGATAAAATTGAGGAAACACTAAGAGTCTGCTACGATAGGTTA

AT4G16950.1[arabidopsis_thalia
AAAAAAGAGTGGATGGAGATGATGCCTAGGCTCCGAAATGTTTCGGA-GATATTA-TGA--AAACATTAAGAGTCAGCTACGATAGATTA

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1270 | 1280 | 1290 | 1300 | 1310 | 1320 | 1330 | 1340 | 1350 |

AT4G16920.2[arabidopsis_thalia
AATAAAAAAATAGAGGTTATTTAAGTGCATTGCATGTTTCTTCAATGGTTTTAAAGTCAGTAACGTCAAAGAATTACTTGAAGATGAT

AT4G16950.1[arabidopsis_thalia
CATCAAAAAGAT-CA-AGATATTTCTTTGCATTGCATGTTTATTCAATGGTTTTGAGGTCAGTTACGTCAAAGATTTACTTGAAGATAAT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1360 | 1370 | 1380 | 1390 | 1400 | 1410 | 1420 | 1430 | 1440 |

AT4G16920.2[arabidopsis_thalia
GTTGGGCTTACAATGTTGGTTGAGAAGTCCCTCATACGTATTACACCGGATGGAGATATAGAGATGCACAATTTGCTAGAGAAATTGGGT

AT4G16950.1[arabidopsis_thalia
GTTGGGCTTACAATGTTGTCTGAGAAGTCCCTCATACGTATTACACCGGATGGACATATAGAGATGCACAATTTGCTAGAGAAATTGGGT

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1450 | 1460 | 1470 | 1480 | 1490 | 1500 | 1510 | 1520 | 1530 |

AT4G16920.2[arabidopsis_thalia
AGAGAAATTGATCGTGCAAAGTCCAAGGGTAATCCTGGAAAAACGTCAATTTCTGACAAATTTTGAGGGATATTCAAGAAGTATTGGCCGAG

AT4G16950.1[arabidopsis_thalia
AGAGAAATTGATCGTGCAAAGTCCAAGGGTAATCCTGGAAAAACGTCAATTTCTGACGAATTTTGAGGGATATTCATGAAGTAGTGACCGAG

TEdenovo-B-R2288-Map4[repetDB.

| Position | 1540 | 1550 | 1560 | 1570 | 1580 | 1590 | 1600 | 1610 | 1620 |

AT4G16920.2[arabidopsis_thalia
AAAACTGGGACAGAATTTCTTCTTGGAATACGTTTGCCACACCCGGGATATCTTACGACAAGGTCGTTCTTAATAGATGAAAAATTATTC

AT4G16950.1[arabidopsis_thalia
AAAACTGGGACAGAAACTCTTCTTGGAATACGTTTGCCATTCGAGGAATATATTTTCGACAAGGCCGTTATTAATAGATAAAGAATCGTTC

TEdenovo-B-R2288-Map4[repetDB.

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                                    1630         1640         1650         1660         1670         1680         1690         1700         1710
AT4G16920.2[arabidopsis_thalia  AAAGGCATGCGTAATCTCCAATATCTAGAAATTGGTTATTGGTCAGATGGGGATCTACCTCAGAGCCTCGTTTATTTGCCCCTTAAACTC
AT4G16950.1[arabidopsis_thalia  AAAGGCATGCGTAATCTCCAATATCTAAAAATTGGTGATTGGTCAGATGGGGGTCAACCTCAGAGCCTCGTTTATTTGCCCCTTAAACTC
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    1720         1730         1740         1750         1760         1770         1780         1790         1800
AT4G16920.2[arabidopsis_thalia  AGATTGCTAGAATGGGTTTATTGTCCGTTGAAGTCTTTGCCATCTACTTTTAGGGCGGAGTATCTAGTTAAACTCATAATGAAGAATAGT
AT4G16950.1[arabidopsis_thalia  AGATTGCTAGACTGGGATGATTGTCCATTGAAGTCTTTGCCATCTACTTTTAAGGCGGAATATCTAGTTAACCTCATAATGAAGTATAGT
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    1810         1820         1830         1840         1850         1860         1870         1880         1890
AT4G16920.2[arabidopsis_thalia  AAGCTTGAGAAACTGTGGGAAGGAACTCTGCCCCTTGGAAGTCTCAAGAAGATGAATTTGTGGTATTCCAAATATTTTAAAGAAATTCCA
AT4G16950.1[arabidopsis_thalia  AAGCTTGAGAAACTGTGGGAAGGAACTCTGCCCCTTGGAAGTCTCAAGAAGATGAATTTGTTGTGTATTCCAAAAATTTGAAAGAAATTCCA
TEdenovo-B-R2288-Map4[repetDB.  ------------------GCCCCTTGGAAGTCTCAAGAAGATGAATTTGTGGTGTTCCAAAAATTTGAAAGAAATTCCA

                                    1900         1910         1920         1930         1940         1950         1960         1970         1980
AT4G16920.2[arabidopsis_thalia  GATCTTTCTTTAGCCATAAACCTCGAGGAATTAAATCTTTCTGAATGCGAATCTTTGGTGACACTTCCTTCCTCGATTCAGAATGCCATT
AT4G16950.1[arabidopsis_thalia  GATCTTTCTAATGCCATAAACCTCGAGGAATTAAATCTTTGAAGGATGCGAATCTTTGGTGACACTTCCTTCCTCGATTCAGAATGCCATT
TEdenovo-B-R2288-Map4[repetDB.  GATCTTTCTTTAGCCATAAACCTCGAGGAATTAGATCTTTCTGGATGCGAATCTTTGGTGACACTTCCTTCCTCGATTCAGAATGCCATT

                                    1990         2000         2010         2020         2030         2040         2050         2060         2070
AT4G16920.2[arabidopsis_thalia  AAACTGAGGACGTTATATTGTTCGGGGGTGCTATTAATAGATTTAAAATCATTAGAAGGCATGTGTAATCTCGAATATCTATCAGTTGAT
AT4G16950.1[arabidopsis_thalia  AAACTGAGGACGTTACATTGTTCGGGGGTGCTATTAATAGATTTAAAATCATTAGAAGGCATGTGTAATCTCGAATATCTATCAGTTGAT
TEdenovo-B-R2288-Map4[repetDB.  AAACTGAGGACGTTATATTGTTCGGGGGTGCTATTAATAGATTTAAAATCATTAGAAGGCATGTGTAATCTCGAATATCTATCAGTTGAT

                                    2080         2090         2100         2110         2120         2130         2140         2150         2160
AT4G16920.2[arabidopsis_thalia  TGCTCACGTATGGAAGGCACTCAGGGCATCGTTTATTTCCCTAGTAAACTCAGATTGCTATTGTGGAATAATTGTCCATTGAAGCGTTTG
AT4G16950.1[arabidopsis_thalia  TGCTCACGTGTGGAAGGCACTCAGGGCATCGTTTATTTCCCTAGTAAACTCAGATTGCTATTGTGGAATAATTGTCCATTGAAGCGTTTG
TEdenovo-B-R2288-Map4[repetDB.  TGCTCACGTATGGAAGGCACTCAGGGCATCGTTTATTTCCCTAGTAAACTCAGATTGCTATTGTGGAATAATTGTCCATTGAAGCGTTTG

                                    2170         2180         2190         2200         2210         2220         2230         2240         2250
AT4G16920.2[arabidopsis_thalia  CATTCTAATTTTAAGGTTGAGTATCTGGTTAAACTCAGAATGGAGAATAGTGACCTTGAGAAGCTGTGGGATGGAACTCAGCCACTTGGA
AT4G16950.1[arabidopsis_thalia  CATTCTAATTTTAAGGTTGAGTATCTGGTTAAACTCAGAATGGAGAATAGTGACCTTGAGAAGCTGTGGGATGGAACTCAGCCACTTGGA
TEdenovo-B-R2288-Map4[repetDB.  CATTCTAATTTTAAGGTTGAGTATCTGGTTAAACTCAGAATGGAGAATAGTGACCTTGAGAAGCTGTGGGATGGAACTCAGCCACTTGGA

                                    2260         2270         2280         2290         2300         2310         2320         2330         2340
AT4G16920.2[arabidopsis_thalia  AGACTCAAGCAGATGTTTCTGCGTGGTTCCAAATATTTGAAAGAGATTCCAGATCTTTCTTTAGCCATAAACCTCGAGGAAGTAGATATT
AT4G16950.1[arabidopsis_thalia  AGACTCAAGCAGATGTTTCTGCGTGGTTCCAAATATTTGAAAGAGATTCCAGATCTTTCTTTAGCCATAAACCTCGAGGAAGTAGATATT
TEdenovo-B-R2288-Map4[repetDB.  AGACTCAAGCAGATGTTTCTGCGTGGTTCCAAATATTTGAAAGAGATTCCAGATCTTTCTTTAGCCATAAACCTCGAGGAAGTAGATATT

                                    2350         2360         2370         2380         2390         2400         2410         2420         2430
AT4G16920.2[arabidopsis_thalia  TGTAAATGCGAATCCTTGGTGACATTTCCTTCCTCGATGCAGAATGCCATTAAACTTATCTATTTAGATATTAGTGATTGCAAAAAGCTA
AT4G16950.1[arabidopsis_thalia  TGTAAATGCGAATCCTTGGTGACATTTCCTTCCTCGATGCAGAATGCCATTAAACTTATCTATTTAGATATTAGTGATTGCAAAAAGCTA
TEdenovo-B-R2288-Map4[repetDB.  TGTAAATGCGAATCCTTGGTGACATTTCCTTCCTCGATGCAGAATGCCATTAAACTTATCTATTTAGATATTAGTGATTGCAAAAAGCTA

                                    2440         2450         2460         2470         2480         2490         2500         2510         2520
AT4G16920.2[arabidopsis_thalia  GAGAGTTTTCCAACCGATCTCAACTTGGAATCTCTCGAGTACCTCAATCTCACTGGATGCCCGAATTTGAGAAATTTCCCAGCAATCAAA
AT4G16950.1[arabidopsis_thalia  GAGAGTTTTCCAACCGATCTCAACTTGGAATCTCTCGAGTACCTCAATCTCACTGGATGCCCGAATTTGAGAAATTTCCCAGCAATCAAA
TEdenovo-B-R2288-Map4[repetDB.  GAGAGTTTTCCAACCGATCTCAACTTGGAATCTCTCGAGTACCTCAATCTCACTGGATGCCCGAATTTGAGAAATTTCCCAGCAATCAAA

                                    2530         2540         2550         2560         2570         2580         2590         2600         2610
AT4G16920.2[arabidopsis_thalia  ATGGGATGTTCAGACGTTGACTTTCCGGAAGGGAGAAATGAGATCGTGGTAGAAGATTGTTTCTGGAACAAGAATCTCCCTGCTGGACTA
AT4G16950.1[arabidopsis_thalia  ATGGGATGTTCAGACGTTGACTTTCCGGAAGGGAGAAATGAGATCGTGGTAGAAGATTGTTTCTGGAACAAGAATCTCCCTGCTGGACTA
TEdenovo-B-R2288-Map4[repetDB.  ATGGGATGTTCAGACGTTGACTTTCCGGAAGGGAGAAATGAGATCGTGGTAGAAGATTGTTTCTGGAACAAGAATCTCCCTGCTGGACTA

                                    2620         2630         2640         2650         2660         2670         2680         2690         2700
AT4G16920.2[arabidopsis_thalia  GATTATCTCGACTGCCTTATGAGATGTATGCCTTGTGAATTTCGCCCAGAATATCTCGTTTTTCTCAATGTGAGGTGCTACAAGCATGAG
AT4G16950.1[arabidopsis_thalia  GATTATCTCGACTGCCTTATGAGATGTATGCCTTGTGAATTTCGCCCAGAATATCTCGTTTTTCTCAATGTGAGGTGCTACAAGCATGAG
TEdenovo-B-R2288-Map4[repetDB.  GATTATCTCGACTGCCTTATGAGATGTATGCCTTGTGAATTTCGCCCAGAATATCTCGTTTTTCTCAATGTGAGGTGCTACAAGCATGAG

                                    2710         2720         2730         2740         2750         2760         2770         2780         2790
AT4G16920.2[arabidopsis_thalia  AAGCTATGGGAAGGCATCCAGTCGCTTGGAAGTCTCGAAGAGATGGATCTGTCAGAATCTGAAAAACCTGACAGAAATTCCAGATCTTTCA
AT4G16950.1[arabidopsis_thalia  AAGCTATGGGAAGGCATCCAGTCGCTTGGAAGTCTCGAAGAGATGGATCTGTCAGAATCTGAAAAACCTGACAGAAATTCCAGATCTTTCA
TEdenovo-B-R2288-Map4[repetDB.  AAGCTATGGGAAGGCATCCAG-----------------------------------------------------------------

                                    2800         2810         2820         2830         2840         2850         2860         2870         2880
AT4G16920.2[arabidopsis_thalia  AAAGGCCACCAATCTGAAGCATTTATATCTCAACAACTGCAAAAGTTTGGTGACACTTCCTTCTACTATTGGGAATCTCCAAAAATTGGTG
AT4G16950.1[arabidopsis_thalia  AAAGGCCACCAATCTGAAGCATTTATATCTCAACAACTGCAAAAGTTTGGTGACACTTCCTTCTACTATTGGGAATCTCCAAAAATTGGTG
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    2890         2900         2910         2920         2930         2940         2950         2960         2970
AT4G16920.2[arabidopsis_thalia  GGTTGGAAATGAAAGAATGCACAGGGCTGGAGGTTCTTCCAACCGATGTCAACTTGTCATCTCTCGAAACCCTCGATCTCAGTGGTTGC
AT4G16950.1[arabidopsis_thalia  AGGTTGGAAATGAAAGAATGCACAGGGCTGGGAGGTTCTTCCAACCGATGTCAACTTGTCATCTCTCGAAACCCTCGATCTCAGTGGTTGC
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    2980         2990         3000         3010         3020         3030         3040         3050         3060
AT4G16920.2[arabidopsis_thalia  TCAAGTTTGAGAACTTTTCCTCTGATTTCAAAGAGTATCAAATGGCTCTATCTGGAAAACACCGCCATTGAAGAAATTCTAGATCTTTCA
AT4G16950.1[arabidopsis_thalia  TCAAGTTTGAGAACTTTTCCTCTGATTTCAAAGAGTATCAAATGGCTCTATCTGGAAAACACCGCCATTGAAGAAATTCTAGATCTTTCA
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    3070         3080         3090         3100         3110         3120         3130         3140         3150
AT4G16920.2[arabidopsis_thalia  AAGGCCACCAAGCTCGAGTCTTTGATACTCAACAACTGCAAAAGTTTGGTGACACTTCCTTCTACAATTGGGAATCTTCAAAATTTGAGA
AT4G16950.1[arabidopsis_thalia  AAGGCCACCAAGCTCGAGTCTTTGATACTCAACAACTGCAAAAGTTTGGTGACACTTCCTTCTACAATTGGGAATCTTCAAAATTTGAGA
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------

                                    3160         3170         3180         3190         3200         3210         3220         3230         3240
AT4G16920.2[arabidopsis_thalia  CGTTTGTACATGAAAAGATGCACAGGGCTGGAGGTTCTTCCAACCGATGTCAACTTGTCATCTCTGGGTATCCTCGATCTCAGTGGTTGC
AT4G16950.1[arabidopsis_thalia  CGTTTGTACATGAAAAGATGCACAGGGCTGGAGGTTCTTCCAACCGATGTCAACTTGTCATCTCTGGGTATCCTCGATCTCAGTGGTTGC
TEdenovo-B-R2288-Map4[repetDB.  ------------------------------------------------------------------------------------------
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                           3250       3260       3270       3280       3290       3300       3310       3320       3330
AT4G16920.2[arabidopsis_thalia   TCAAGTTTGAGAACTTTTCCTCTGATTTCAACTAATATTGTATGGCTCTATCTGGAAAACACCGCCATTGGAGAAGTTCCCTGCTGCATT
AT4G16950.1[arabidopsis_thalia   TCAAGTTTGAGAACTTTTCCTCTGATTTCAACTAATATTGTATGGCTCTATCTGGAAAACACCGCCATTGGAGAAGTTCCCTGCTGCATT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3340       3350       3360       3370       3380       3390       3400       3410       3420
AT4G16920.2[arabidopsis_thalia   GAGGATTTCACGAGGCTCCGTGTACTACTGATGTATTGTTGCCAGAGGTTGAAAAACATCTCCCCAAACATTTTCAGACTGAGAAGTCTA
AT4G16950.1[arabidopsis_thalia   GAGGATTTCACGAGGCTCCGTGTACTACTGATGTATTGTTGCCAGAGGTTGAAAAACATCTCCCCAAACATTTTCAGACTGAGAAGTCTA
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3430       3440       3450       3460       3470       3480       3490       3500       3510
AT4G16920.2[arabidopsis_thalia   ATGTTCGCCGACTTTACAGACTGTAGAGGTGTCATCAAGGCGTTGAGTGATGCAACTGTGGTAGCGACAATGGAAGATCACGTTTCTTGT
AT4G16950.1[arabidopsis_thalia   ATGTTCGCCGACTTTACAGACTGTAGAGGTGTCATCAAGGCGTTGAGTGATGCAACTGTGGTAGCGACAATGGAAGATAGCGTTTCTTGT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3520       3530       3540       3550       3560       3570       3580       3590       3600
AT4G16920.2[arabidopsis_thalia   GTACCATTATCTGAAAACATTGAATATACATGTGAACGTTTCTGGGATGCGTTGTATGATGATTATAAGAACTACGTCGTAGATTGG
AT4G16950.1[arabidopsis_thalia   GTACCATTATCTGAAAACATTGAATATACATGTGAACGTTTCTGGGGTGAGTTGTATG--G-TGAT----G-----GT-G-A--TTGG
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3610       3620       3630       3640       3650       3660       3670       3680       3690
AT4G16920.2[arabidopsis_thalia   CGCTTACGTAGGGAATCCTTTAGCTTCTGCAATTGCTTCAAATTGGAAAGAGATGCGCGAGAACTTATCCTACGATCATGCTTCAAGCAT
AT4G16950.1[arabidopsis_thalia   GACTTAGGTACTGAATATTTTAGCTTCCGTAATTGCTTCAAATTGGATAGAGATGCGCGAGAGCTCATCCTACGATCATGCTTCAAGCCT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3700       3710       3720       3730       3740       3750       3760       3770       3780
AT4G16920.2[arabidopsis_thalia   GTGGCCTTACCAGGTGGAGAAATCCCTAAGTATTTCACGTATCGAGCTTATGGAGATTCCCTAACTGTCACTTTACCTCAGAGCTCTCTT
AT4G16950.1[arabidopsis_thalia   GTGGCCTTACCAGGTGGAGAAATCCCTAAGTATTTCACGTATCGAGCTTATGGAGATTCCCTAACTGTCACTTTACCTCGGAGCTCTCTT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3790       3800       3810       3820       3830       3840       3850       3860       3870
AT4G16920.2[arabidopsis_thalia   TCTCAATACTTCTTTCCATTTAAGGCTTGCGTCGTGGTTGAACCTCCCTCCGAGGGCAAGGGTTTTTATCCATCCTTGAAGGTAAATGTT
AT4G16950.1[arabidopsis_thalia   TCTCAATCCTTCTTGCGATTTAAGGCTTGTCTCGTGGTTGACCCTCTCTCCGAGGGCAAGGGTTTTTATCGATATTTGGAGGTAAACTTT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3880       3890       3900       3910       3920       3930       3940       3950       3960
AT4G16920.2[arabidopsis_thalia   GGCTTCAATGGCAAACAGTATCAGAAATCATTTTTTGAAGATGCAGACCTGCAGTTTTGTAAGACGGATCATCTGTTTTTCTGTTCCTTC
AT4G16950.1[arabidopsis_thalia   GGCTTCAATGGCAAACAGTATCAGAAATCATTTTTTGAAGATGAAGAACTGGAGTTTTGTAAGACGGATCATCTGTTTTTCTGTTCCTTC
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           3970       3980       3990       4000       4010       4020       4030       4040       4050
AT4G16920.2[arabidopsis_thalia   AAGATCTGGTCTGAATGGAGTTTAAATTTTGTTGCTCCAATAGGATCAAAGAATGCGGTGTACGACTCTTGTATGTCTATCAAGAAACAG
AT4G16950.1[arabidopsis_thalia   AAGATCTGATCTTAATGGAGTTTAAGTTTTGTTGCTCCAATAGGATCAAAGAATGCGGTGTACGACTCATGTATGTCTCTCAAGAAACAG
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4060       4070       4080       4090       4100       4110       4120       4130       4140
AT4G16920.2[arabidopsis_thalia   AGTACAACCAACAGACTACGAGAAGCGAGAAGCGGATG--------------------------------------------------
AT4G16950.1[arabidopsis_thalia   AGTACAACCAACAGACTACGAGAAGCAAGAAGCGGATG--------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4150       4160       4170       4180       4190       4200       4210       4220       4230
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4240       4250       4260       4270       4280       4290       4300       4310       4320
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4330       4340       4350       4360       4370       4380       4390       4400       4410
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4420       4430       4440       4450       4460       4470       4480       4490       4500
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4510       4520       4530       4540       4550       4560       4570       4580       4590
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4600       4610       4620       4630       4640       4650       4660       4670       4680
AT4G16920.2[arabidopsis_thalia   ------------------------------------------------------------------------------------------
AT4G16950.1[arabidopsis_thalia   ------------------------------------------------------------------------------------------
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4690       4700       4710       4720       4730       4740       4750       4760       4770
AT4G16920.2[arabidopsis_thalia   ----------------------------------------------------------------------------ATCAGCA
AT4G16950.1[arabidopsis_thalia   ----------------------------------------------------------------------------ATCAACA
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------

                           4780       4790       4800       4810       4820       4830       4840       4850       4860
AT4G16920.2[arabidopsis_thalia   ACATTTGCATATCCGCTGATTCAATAGCCCAAAAGGCAGAAGCGTTTTTGGCCTAACTTCGGCCAAAGATGTAACCAGCATAAGGAACAAT
AT4G16950.1[arabidopsis_thalia   ACATTTGCAT-T--GCTGATTCAATAGCCCAAAAGGCAGAAGCGTTTTTGGCCTAACTTTGGCCAAAGATGTGACCAGCATAAGGAACAAT
TEdenovo-B-R2288-Map4[repetDB.   ------------------------------------------------------------------------------------------
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                                    4870              4880              4890              4900              4910              4920              4930              4940              4950
                         . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . |

AT4G16920.2[arabidopsis_thalia   C C T T C G G G T G A A G G A A A G A G C T T T T A A A C T T T C T A C A G G A G A C A T T G T C T G G T C C A C T T C C A A A C C A T G A A G T A T C A T C C A G C T A T C C T A
AT4G16950.1[arabidopsis_thalia   C C A T C A G C T G A A G G A A A G A G C T T T T A A A C T T T C T G C A G G A G A C A T T G T C T G G T C C A C T T C C A A A C C A T G A A G T A T C A T C C A G C T A T C C T A
TEdenovo-B-R2288-Map4[repetDB.   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                    4960              4970              4980              4990              5000              5010              5020              5030              5040
                         . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . |

AT4G16920.2[arabidopsis_thalia   C G T C G A T G A G A A A A T A T G T C G C T G C T G T T C C C C T A T G C C G C T G C A C T C T T T A A T T A T A T C G A G A A G A G T G A A A G T T G T A G G C C T G A A C T A
AT4G16950.1[arabidopsis_thalia   C G T C G A T G A G A A A A C A T G T C G C T G C T G T T C C C C C A T C C C G C T G C A C T C T T T A A T T A T A T - G A A A A G A G T G A A A G T T G T A G G C C T G A A C T A
TEdenovo-B-R2288-Map4[repetDB.   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                    5050              5060              5070              5080              5090              5100              5110              5120              5130
                         . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . |

AT4G16920.2[arabidopsis_thalia   C T C A C T A G A A C A T C T A G G A T G G G A A G C T C A T T C T C T G G G G C T G T T C T T G A C T G A A T T G G T T T G C T T C A G A T C T T T G C A T C A A G G G C C T A A
AT4G16950.1[arabidopsis_thalia   C T C A C T A G A A C A T C T A G G A T A G G A A G C T C A T T C T C T G G G G C T G T T C T T G A C T G A A T T G G T T T G C T T C A G A T C T T T G C A T C G A G G G C C T A A
TEdenovo-B-R2288-Map4[repetDB.   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                    5140              5150              5160              5170              5180              5190              5200              5210              5220
                         . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . |

AT4G16920.2[arabidopsis_thalia   A T A A A A C G T A T G G T C T G A T G G G G A C G A C A C C T T T C A C T G C T G A C C C T G A A C A G T T A A G A T C T G C C T T G A C T G A A T T C A C A C C A T C A C A T T
AT4G16950.1[arabidopsis_thalia   A T A A G A C G T T T G G T C T G A T G G G G A C G A C A C C T T T C A C T G C T G A C C C T G A T C A G T T A A G A T C T G C C T T G A C T G A A T T C A C A C C A T C A C A T T
TEdenovo-B-R2288-Map4[repetDB.   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                    5230              5240              5250
                         . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . .

AT4G16920.2[arabidopsis_thalia   G T T A A G A T T C C T T T C C T G G A T C C T T A G C C G T C
AT4G16950.1[arabidopsis_thalia   G T T A A G A T T C C T T T C C T G G A T C C T T A G C C G T C
TEdenovo-B-R2288-Map4[repetDB.   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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