

Supplemental table I. Primers used in this study

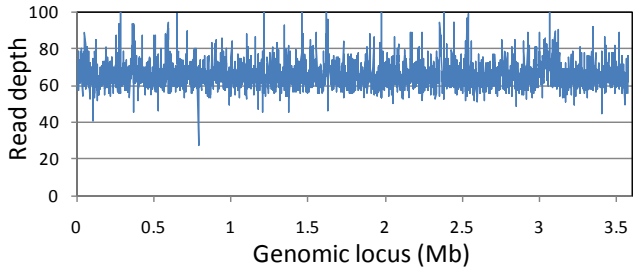
Position	Primer F	PrimerR
69849	TATTGGACAGCGCCCGTCAACTT	GAAGACCGGGTGAAAGAAGTAGAAA
125218	ATCGGTTTCGTGGTTAGCGGTTT	ATTGGCCGCTGACCAAGGAAGTT
125262-125273	ATCGGTTTCGTGGTTAGCGGTTT	ATTGGCCGCTGACCAAGGAAGTT
126257	ACCGTTTTCTCAGAGTAGGGAATACC	GATTATGGGGACTTCTGTGTCCAA
386410-386411	GAGCCCCGCTGTTTAAACAATT	TTTTTTGACCGGCTGACAGGGATT
387006	ATTTGATCAGGAAGTTGCCCA	TCGCTGAGCACAATAATAGCCTCT
731367	GAGAATTTTAACCAGTTCGCCCA	ACCGTCGCAGTCAAATTCCTTT
781625-781626	CCCCGTTAATTTTTCTTACCATG	TTTCCCCCTCTCTCATTAGAATAAAG
831647	GGCTGTTGGTTTACACAGAGCAA	TACGACGAATTTTGCCGGAGAT
842060	TAGCAACCCTTAGGGTCAGAGAA	CTGGCTACCAAAAACGCCATAA
909360	ACAATTGGGGCAATCAAGTACCAC	GCGATCGAGTATAATGTTGCCAT
943495	TCCACGCTTTTACCATCCACGTAA	AACCGTAGGAGTTGATGACGTTGG
1012958	AGACAGTGCCATCAACAACAACACC	TAActCTGGTTCCTAGGGGCAGACT
1192983	CGTGTGGAGAAACAGGATTGG	GGCAGGAATAGCATCGTAATCATC
1200143-1201488	AAAGTGTGAGTGAATATTTGGGGG	CCAGGCAAAGAAAAGAAAATATTCTTG
1204616	AAATGCCATCAAGGCCGGTAAT	CAGACATAGGTAAACCAATGGCG
1300941-1300985	GGGGGCTAACCTGCTTTTTTGT	AATCTGCCCGGCTTAAATCTAC
1364187	GCCGGGGTAACCAGTAAAAAT	GACCGGGTAAAAGGATTTTTTTG
1392586	TTGTGGAACGTTCCCTCACTAG	CACATAATCCCTGGTTTGGGT
1423340-1423341	ATGGACTAGATGTCATCGTTGGTGA	AGTGGCGTAGGGATTGACAAATGT
1437136	ACCAAGTACGACGTTGATTTACCT	GGGGCATTGGAATTTCAAGCT
1437389	TATTGAGCTTGTGCAATCTTACCC	CCTTAACACGTTGCCATAATGTA
1470212	AGCAAAGCGGAAGAATTTACCC	CCTGGTTTGCCAAAGTTTTTCA
1597057	GGCGAAAATTGCTTTAGACGCAA	ATATTGGCTGTACACCGTTCCCAT
1763998	AAGGCCACCACCTCCAATAATCA	CGCTGTAAACTTTTTGGATCATTTCC
1764198	CAGTACAAAATGGCACCGTTGA	TCAATGGTGCCCCGGTCTAGAG
1812419	TTTTAGAATCATTAATCCCGGCAA	AACCGATGCGAGCCTTGAGTAATA
2048341-2049583	ATTTCAATGATGGCCCGGATAG	AGGGTGTATGGCAGGCGTAAA
2092571	GTTGAATCGTTGAGTCAATCCTCG	ATGGCAAATCCATCACGGAAG
2198893	ACCGTCTAAAGCAGTTTGGACTGTCT	TCGTGGATGACATCCTCATCAAT
2204584	GTTAGTGTCAAGGACAAAGCGTT	CGGCCATTGGACTTCTTAAAAAG
2301721	ACCTGACTTACATCGAAGATCATGAC	GCAGCAAAGGAAGCATAAAATACC
2350285-2350286	GCACCAAATTAGTCTAGGGAGAGAAG	GTAAACGGCGCAGTTGTTCCAC
2360245-2360246	AGTTTGTGATTGACACCACTCCTC	AAAGGTATAGGTCGTGCCGTTAAAG
2370197	GCGGATTTAGACCAAGCCCTAAAA	ATTATCGACAGTAAATCCGAGGGCCA
2409244	AGGATTAAGGCCGTAGTCCGTTA	ATCTATCGCCGGGGAAAGATAAT
2419399	AACTGACTGATATCCTTGAGGGCTT	CTGGATAAGGACTGTAATCCGGAA
2521013	CTGCCAATTTTCTTTGGCATGAG	GTTGTTTTTCTCTGTAGAAAGACGATC
2544044-2544045	AAAATCCGGTAAGGTATGCCGA	AACCAAGGGGGAAAATGGGGAAT
2580625	GACTACTGGGGTAATAGTGGCTGTG	CCTGGTAATGGGTTCAAATTGGGT
2580626	GACTACTGGGGTAATAGTGGCTGTG	CCTGGTAATGGGTTCAAATTGGGT
2602717	CCTATTTGGGCGATTCTAGAAA	GGATAAACACCTTTATGAACCATTGTC
2602734	CCTATTTGGGCGATTCTAGAAA	GGATAAACACCTTTATGAACCATTGTC
2674108	TAGGTCATTGGGGCTTGACAAT	GGAAGCGGCCAGAGAATAGATAA
2736514-2736515	CCCTATATTATTATCGCCCCCTTTAC	ATGATCAACAGATGGTTACCGGGA
2748897	GAAGACCAGAGAGATTTGTTTCAACCT	ATAACACCGATGCCAATCCAAG
2881614-2881615	TCCCTTTTGAACAAGCCCTCAT	GTAAAAATTGACTTGCTTCCGGGTC
3014665	TTGCTAAATTAGGCTTCTGGCG	CAAACAAATTCCTAAAGCGGGC
3096187	GGAGTGTCAAACCGGGATAGTTTAGTT	TCACCATTTTCCATTCTTACC
3098707	AATGGATAATGCTCCTATTCATCGT	TGGTCGTTACCTCTTTATTACAAGTGT
3142651	AATTGGTGAGAAAGTCTGGTGCC	AGTGTCCATGGTTAATTCCGGG
3260096	GTCCAATGAAAAGTAACGATTGAGG	CACCGTTAACGCCAATCAATCT
3400322-3401506	Outer TTCAAGAACTTTGACCTAAAGCAGAAGT	TTGCAGACTTTGTATTTGAGGCCAG
3400322-3401506	Inner TTGGGTGGAATTTAGTCTGGTGC	CTTCAACGGTAACTGATTGCCAT

*To avoid to amplify the multicopy region, the locus 3400322-3401506 were amplified from far-outside region.

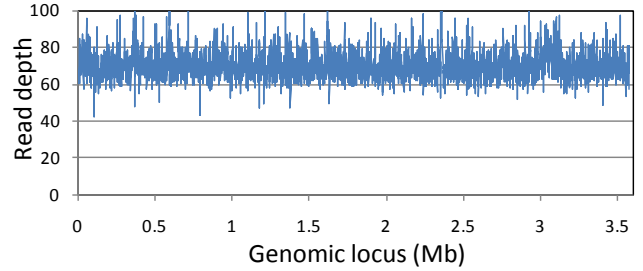
Supplemental Figure 1

Distribution of 1 kb-averaged read depth calculated by mapping programs; BWA and MAQ. Horizontal axis indicates the genomic locus of *Synechocystis* sp. PCC 6803 and vertical axis indicates the read depth. Title of each panel shows the name of mapping program and of the substrain. The genome sequence of the Kazusa strain in the database (NCBI accession number; NC_000911), was used as the reference for mapping analyses.

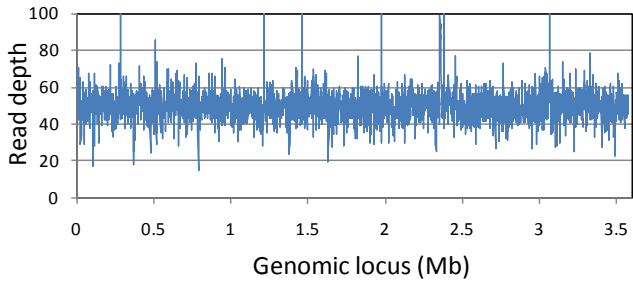
BWA_GT-I



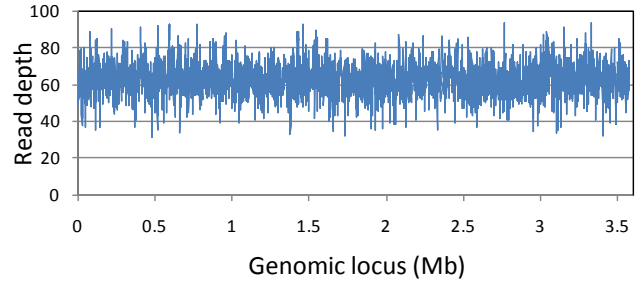
MAQ_GT-I



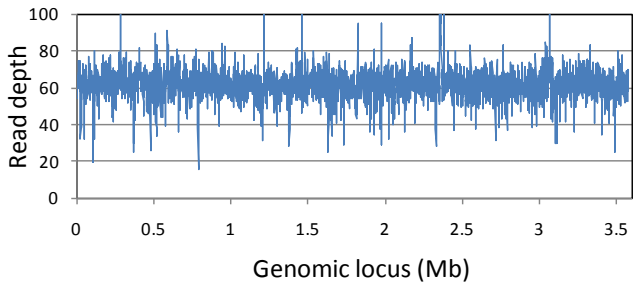
BWA_PCC-P



MAQ_PCC-P



BWA_PCC-N



MAQ_PCC-N

