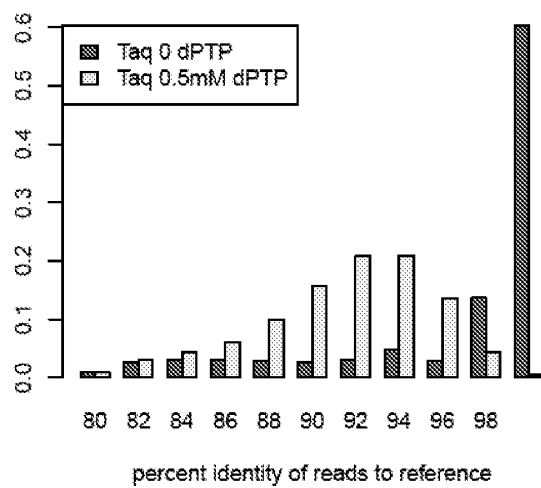
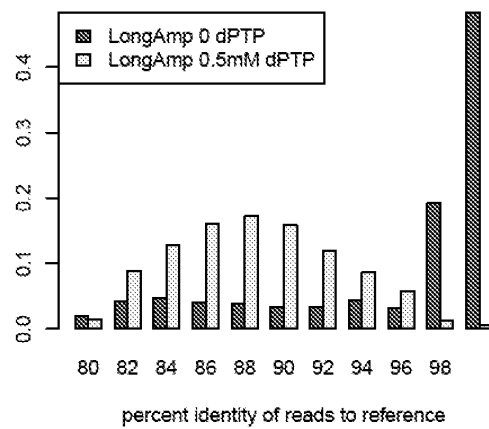


FIGURE 1

Panel A:



Panel B:



Panel C:

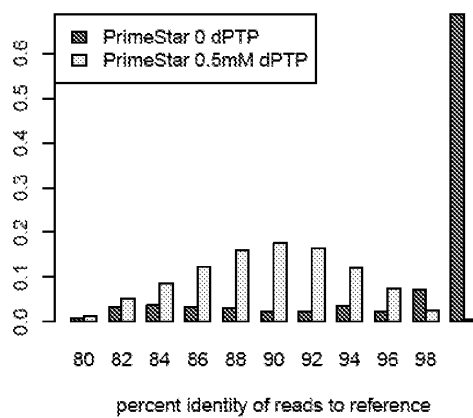


FIGURE 2

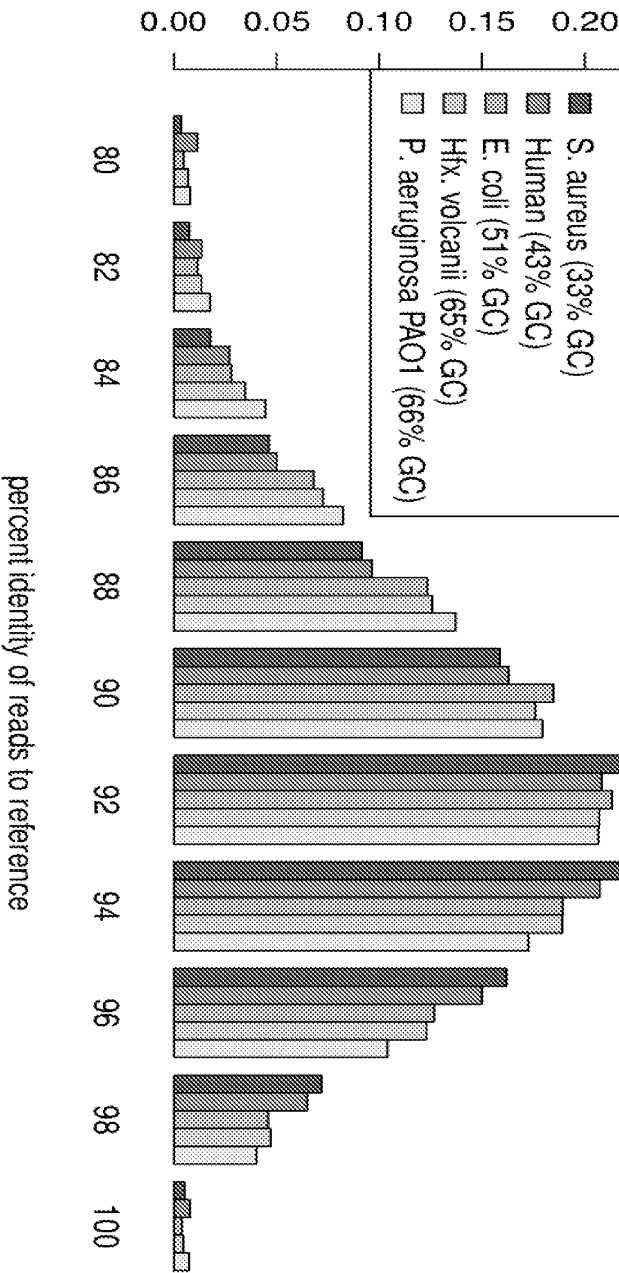


FIGURE 3

SEQ ID NO: 1 – nucleotide sequence of DNA polymerase from *Thermococcus* sp. KS-1

```

atgatcctcg acactgacta cataactgag aatggaaaaac ccgtcataag gattttcaag
aaggagaacg gcgagttaa gattgagtag gataggactt ttgaacccta catttacgcc
ctcctgaagg acgattctgc cattgaggag gtcaagaaga taaccgccga gaggcacgga
acggttgtaa cggttaagcg ggctgaaaag gttcagaaga agttcctcgg gagaccagtt
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atggagtctc tcaagtatat caacgcaaaa ctcccgggcg cgcttgagct cgagtacgag
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ggcaagataa caacgcgcgg acttgagatt gtgaggcgcg actggagcga gatagcgaaa
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gttgagagaa ttctgagagc cttcggttac cgcaaggaa acctgcgcta ccagaagacg
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SEQ ID NO: 2 – polypeptide sequence of DNA polymerase from *Thermococcus* sp. KS-1

Met Ile Leu Asp Thr Asp Tyr Ile Thr Glu Asn Gly Lys Pro Val Ile
 Arg Ile Phe Lys Lys Glu Asn Gly Glu Phe Lys Ile Glu Tyr Asp Arg
 Thr Phe Glu Pro Tyr Ile Tyr Ala Leu Leu Lys Asp Asp Ser Ala Ile
 Glu Glu Val Lys Lys Ile Thr Ala Glu Arg His Gly Thr Val Val Thr
 Val Lys Arg Ala Glu Lys Val Gln Lys Lys Phe Leu Gly Arg Pro Val
 Glu Val Trp Lys Leu Tyr Phe Thr His Pro Gln Asp Val Pro Ala Ile
 Arg Asp Lys Ile Arg Glu His Pro Ala Val Ile Asp Ile Tyr Glu Tyr
 Asp Ile Pro Phe Ala Lys Arg Tyr Leu Ile Asp Lys Gly Leu Val Pro
 Met Glu Gly Asp Glu Glu Leu Lys Met Leu Ala Phe Asp Ile Glu Thr
 Leu Tyr His Glu Gly Glu Glu Phe Ala Glu Gly Pro Ile Leu Met Ile
 Ser Tyr Ala Asp Glu Glu Gly Ala Arg Val Ile Thr Trp Lys Asn Ala
 Asp Leu Pro Tyr Val Asp Val Val Ser Thr Glu Arg Glu Met Ile Lys
 Arg Phe Leu Lys Val Val Lys Glu Lys Asp Pro Asp Val Leu Ile Thr
 Tyr Asn Gly Asp Asn Phe Asp Phe Ala Tyr Leu Lys Lys Arg Cys Glu
 Lys Leu Gly Ile Asn Phe Thr Leu Gly Arg Asp Gly Ser Glu Pro Lys
 Ile Gln Arg Met Gly Asp Arg Phe Ala Val Glu Val Lys Gly Arg Ile
 His Phe Asp Leu Tyr Pro Val Ile Arg Arg Thr Ile Asn Leu Pro Thr
 Tyr Thr Leu Glu Ala Val Tyr Glu Ala Val Phe Gly Gln Pro Lys Glu
 Lys Val Tyr Ala Glu Glu Ile Ala Thr Ala Trp Glu Ser Gly Glu Gly
 Leu Glu Arg Val Ala Arg Tyr Ser Met Glu Asp Ala Lys Val Thr Tyr
 Glu Leu Gly Lys Glu Phe Phe Pro Met Glu Ala Gln Leu Ser Arg Leu
 Ile Gly Gln Ser Leu Trp Asp Val Ser Arg Ser Ser Thr Gly Asn Leu
 Val Glu Trp Phe Leu Leu Arg Lys Ala Tyr Glu Arg Asn Glu Leu Ala
 Pro Asn Lys Pro Asp Glu Lys Glu Leu Ala Arg Arg Arg Gln Ser Tyr
 Glu Gly Gly Tyr Val Lys Glu Pro Glu Arg Gly Leu Trp Glu Asn Ile
 Val Tyr Leu Asp Phe Arg Ser Leu Tyr Pro Ser Ile Ile Ile Thr His
 Asn Val Ser Pro Asp Thr Leu Asn Arg Glu Gly Cys Lys Glu Tyr Asp
 Val Ala Pro Gln Val Gly His Arg Phe Cys Lys Asp Phe Pro Gly Phe
 Ile Pro Ser Leu Leu Gly Asp Leu Leu Glu Glu Arg Gln Lys Ile Lys
 Lys Lys Met Lys Ala Thr Ile Asp Pro Ile Glu Arg Lys Leu Leu Asp
 Tyr Arg Gln Arg Ala Ile Lys Ile Leu Ala Asn Ser Tyr Tyr Gly Tyr
 Tyr Gly Tyr Ala Arg Ala Arg Trp Tyr Cys Lys Glu Cys Ala Glu Ser
 Val Thr Ala Trp Gly Arg Glu Tyr Ile Thr Met Thr Ile Arg Glu Ile
 Glu Glu Lys Tyr Gly Phe Lys Val Ile Tyr Ser Asp Thr Asp Gly Phe
 Phe Ala Thr Ile Pro Gly Ala Asp Ala Glu Thr Val Lys Lys Lys Ala
 Met Glu Phe Leu Lys Tyr Ile Asn Ala Lys Leu Pro Gly Ala Leu Glu
 Leu Glu Tyr Glu Gly Phe Tyr Lys Arg Gly Phe Phe Val Thr Lys Lys
 Lys Tyr Ala Val Ile Asp Glu Glu Gly Lys Ile Thr Thr Arg Gly Leu
 Glu Ile Val Arg Arg Asp Trp Ser Glu Ile Ala Lys Glu Thr Gln Ala
 Arg Val Leu Glu Ala Leu Leu Lys Asp Gly Asp Val Glu Lys Ala Val
 Arg Ile Val Lys Glu Val Thr Glu Lys Leu Ser Lys Tyr Glu Val Pro
 Pro Glu Lys Leu Val Ile His Glu Gln Ile Thr Arg Asp Leu Lys Asp
 Tyr Lys Ala Thr Gly Pro His Val Ala Val Ala Lys Arg Leu Ala Ala
 Arg Gly Val Lys Ile Arg Pro Gly Thr Val Ile Ser Tyr Ile Val Leu
 Lys Gly Ser Gly Arg Ile Gly Asp Arg Ala Ile Pro Phe Asp Glu Phe
 Asp Pro Thr Lys His Lys Tyr Asp Ala Glu Tyr Tyr Ile Glu Asn Gln
 Val Leu Pro Ala Val Glu Arg Ile Leu Arg Ala Phe Gly Tyr Arg Lys
 Glu Asp Leu Arg Tyr Gln Lys Thr Arg Gln Val Gly Leu Gly Ala Trp
 Leu Lys Pro Lys Gly Thr

SEQ ID NO: 3 – nucleic acid sequence of DNA polymerase from *Thermococcus celer*

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atgacccctcg acgctgacta catcaccgaa gatgggaagc ccgtcgtgag gatattcagg
aaggagaagg gcgagttcag aatcgactac gacagggact tcgagcccta catctacgcc
ctcctgaagg acgattcggc catcgaggag gtgaagagga taaccgttga gcgccacggg
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SEQ ID NO: 4 – polypeptide sequence of DNA polymerase from *Thermococcus celer*

Met Ile Leu Asp Ala Asp Tyr Ile Thr Glu Asp Gly Lys Pro Val Val
Arg Ile Phe Arg Lys Glu Lys Gly Glu Phe Arg Ile Asp Tyr Asp Arg
Asp Phe Glu Pro Tyr Ile Tyr Ala Leu Leu Lys Asp Asp Ser Ala Ile
Glu Glu Val Lys Arg Ile Thr Val Glu Arg His Gly Lys Ala Val Arg
Val Lys Arg Val Glu Lys Val Glu Lys Lys Phe Leu Asn Arg Pro Ile
Glu Val Trp Lys Leu Tyr Phe Asn His Pro Gln Asp Val Pro Ala Ile
Arg Asp Glu Ile Arg Lys His Pro Ala Val Val Asp Ile Tyr Glu Tyr
Asp Ile Pro Phe Ala Lys Arg Tyr Leu Ile Asp Lys Gly Leu Val Pro
Met Glu Gly Glu Glu Glu Leu Lys Leu Met Ala Phe Asp Ile Glu Thr
Leu Tyr His Glu Gly Asp Glu Phe Gly Glu Gly Pro Ile Leu Met Ile
Ser Tyr Ala Asp Gly Asp Gly Ala Arg Val Ile Thr Trp Lys Lys Ile
Asp Leu Pro Tyr Val Asp Val Val Ser Thr Glu Lys Glu Met Ile Lys
Arg Phe Leu Gln Val Val Lys Glu Lys Asp Pro Asp Val Leu Val Thr
Tyr Asn Gly Asp Asn Phe Asp Phe Ala Tyr Leu Lys Arg Arg Ser Glu
Glu Leu Gly Leu Lys Phe Ile Leu Gly Arg Asp Gly Ser Glu Pro Lys
Ile Gln Arg Met Gly Asp Arg Phe Ala Val Glu Val Lys Gly Arg Ile
His Phe Asp Leu Tyr Pro Val Ile Arg Arg Thr Val Asn Leu Pro Thr
Tyr Thr Leu Glu Ala Val Tyr Glu Ala Ile Phe Gly Arg Pro Lys Glu
Lys Val Tyr Ala Gly Glu Ile Val Glu Ala Trp Glu Thr Gly Glu Gly
Leu Glu Arg Val Ala Arg Tyr Ser Met Glu Asp Ala Lys Val Thr Phe
Glu Leu Gly Arg Glu Phe Phe Pro Met Glu Ala Gln Leu Ser Arg Leu
Ile Gly Gln Gly Leu Trp Asp Val Ser Arg Ser Ser Thr Gly Asn Leu
Val Glu Trp Phe Leu Leu Arg Lys Ala Tyr Glu Arg Asn Glu Leu Ala
Pro Asn Lys Pro Ser Gly Arg Glu Val Glu Ile Arg Arg Arg Gly Tyr
Ala Gly Gly Tyr Val Lys Glu Pro Glu Arg Gly Leu Trp Glu Asn Ile
Val Tyr Leu Asp Phe Arg Ser Leu Tyr Pro Ser Ile Ile Ile Thr His
Asn Val Ser Pro Asp Thr Leu Asn Arg Glu Gly Cys Glu Asn Tyr Asp
Val Ala Pro Gln Val Gly His Lys Phe Cys Lys Asp Phe Pro Gly Phe
Ile Pro Ser Leu Leu Gly Gly Leu Leu Glu Glu Arg Gln Lys Ile Lys
Arg Arg Met Lys Ala Ser Val Asp Pro Val Glu Arg Lys Leu Leu Asp
Tyr Arg Gln Arg Ala Ile Lys Ile Leu Ala Asn Ser Phe Tyr Gly Tyr
Tyr Gly Tyr Ala Arg Ala Arg Trp Tyr Cys Arg Glu Cys Ala Glu Ser
Val Thr Ala Trp Gly Arg Glu Tyr Ile Asp Arg Val Ile Arg Glu Leu
Glu Glu Lys Phe Gly Phe Lys Val Leu Tyr Ala Asp Thr Asp Gly Leu
His Ala Thr Ile Pro Gly Ala Asp Ala Gly Thr Val Lys Glu Arg Ala
Arg Gly Phe Leu Arg Tyr Ile Asn Pro Lys Leu Pro Gly Leu Leu Glu
Leu Glu Tyr Glu Gly Phe Tyr Leu Arg Gly Phe Phe Val Thr Lys Lys
Lys Tyr Ala Val Ile Asp Glu Glu Gly Lys Ile Thr Thr Arg Gly Leu
Glu Ile Val Arg Arg Asp Trp Ser Glu Val Ala Lys Glu Thr Gln Ala
Arg Val Leu Glu Ala Ile Leu Arg His Gly Asp Val Glu Glu Ala Val
Arg Ile Val Arg Glu Val Thr Glu Lys Leu Ser Lys Tyr Glu Val Pro
Pro Glu Lys Leu Val Ile His Glu Gln Ile Thr Arg Asp Leu Arg Asp
Tyr Lys Ala Thr Gly Pro His Val Ala Val Ala Lys Arg Leu Ala Gly
Arg Gly Val Arg Ile Arg Pro Gly Thr Val Ile Ser Tyr Ile Val Leu
Lys Gly Ser Gly Arg Ile Gly Asp Arg Ala Ile Pro Phe Asp Glu Phe
Asp Pro Thr Lys His Arg Tyr Asp Ala Asp Tyr Tyr Ile Glu Asn Gln
Val Leu Pro Ala Val Glu Arg Ile Leu Lys Ala Phe Gly Tyr Arg Lys
Glu Asp Leu Lys Tyr Gln Lys Thr Arg Gln Val Gly Leu Gly Ala Trp
Leu Asn Ala Gly Lys Gly

SEQ ID NO: 5 – nucleic acid sequence of DNA polymerase from *Thermococcus siculi*

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atgacacctcg acacgggacta catcacggaa gatgggaaac ccgtcataag gatattcaag
aaagagaacg gcgagttcaa gatcgagtac gacaggactt ttgaacccta catctacgcc
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aggcagggtt gacttggggc gtggtctgaag ccgaagggga aggggtga

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SEQ ID NO: 6 – polypeptide sequence of DNA polymerase from *Thermococcus siculi*

Met Ile Leu Asp Thr Asp Tyr Ile Thr Glu Asp Gly Lys Pro Val Ile
Arg Ile Phe Lys Lys Glu Asn Gly Glu Phe Lys Ile Glu Tyr Asp Arg
Thr Phe Glu Pro Tyr Ile Tyr Ala Leu Leu Lys Asp Asp Ser Ala Ile
Glu Asp Val Lys Lys Ile Thr Ala Glu Arg His Gly Thr Val Val Lys
Val Lys Arg Ala Glu Lys Val Gln Lys Lys Phe Leu Gly Arg Pro Val
Glu Val Trp Lys Leu Tyr Phe Thr His Pro Gln Asp Val Pro Ala Ile
Arg Asp Lys Ile Arg Lys His Pro Ala Val Ile Asp Ile Tyr Glu Tyr
Asp Ile Pro Phe Ala Lys Arg Tyr Leu Ile Asp Lys Gly Leu Ile Pro
Met Glu Gly Glu Glu Glu Leu Lys Met Leu Ala Phe Asp Ile Glu Thr
Leu Tyr His Glu Gly Glu Glu Phe Ala Glu Gly Pro Ile Leu Met Ile
Ser Tyr Ala Asp Glu Ser Glu Ala Arg Val Ile Thr Trp Lys Lys Ile
Asp Leu Pro Tyr Val Asp Val Val Ser Thr Glu Lys Glu Met Ile Lys
Arg Phe Leu Arg Val Val Lys Glu Lys Asp Pro Asp Val Leu Ile Thr
Tyr Asn Gly Asp Asn Phe Asp Phe Ala Tyr Leu Lys Lys Arg Cys Glu
Lys Leu Gly Ile Asn Phe Leu Leu Gly Arg Asp Gly Ser Glu Pro Lys
Ile Gln Arg Met Gly Asp Arg Phe Ala Val Glu Val Lys Gly Arg Ile
His Phe Asp Leu Tyr Pro Val Ile Arg Arg Thr Ile Asn Leu Pro Thr
Tyr Met Leu Glu Ala Val Tyr Glu Ala Ile Phe Gly Lys Pro Lys Glu
Lys Val Tyr Ala Glu Glu Ile Ala Thr Ala Trp Glu Thr Gly Glu Gly
Leu Glu Arg Val Ala Arg Tyr Ser Met Glu Asp Ala Lys Val Thr Phe
Glu Leu Gly Lys Glu Phe Phe Pro Met Glu Ala Gln Leu Ser Arg Leu
Val Gly Gln Ser Phe Trp Asp Val Ala Arg Ser Ser Thr Gly Asn Leu
Val Glu Trp Phe Leu Leu Arg Lys Ala Tyr Glu Arg Asn Glu Leu Ala
Pro Asn Lys Pro Ser Gly Arg Glu Tyr Asp Glu Arg Arg Gly Gly Tyr
Ala Gly Gly Tyr Val Lys Glu Pro Glu Lys Gly Leu Trp Glu Asn Ile
Val Tyr Leu Asp Tyr Lys Ser Leu Tyr Pro Ser Ile Ile Ile Thr His
Asn Val Ser Pro Asp Thr Leu Asn Arg Glu Gly Cys Lys Glu Tyr Asp
Val Ala Pro Gln Val Gly His Arg Phe Cys Lys Asp Phe Pro Gly Phe
Ile Pro Ser Leu Leu Gly Asp Leu Leu Glu Glu Arg Gln Lys Ile Lys
Arg Lys Met Lys Ala Thr Ile Asp Pro Ile Glu Arg Lys Leu Leu Asp
Tyr Arg Gln Arg Ala Ile Lys Ile Leu Leu Asn Ser Phe Tyr Gly Tyr
Tyr Gly Tyr Ala Arg Ala Arg Trp Tyr Cys Lys Glu Cys Ala Glu Ser
Val Thr Ala Trp Gly Arg Glu Tyr Ile Thr Met Thr Ile Arg Glu Ile
Glu Glu Lys Tyr Gly Phe Lys Val Leu Tyr Ala Asp Thr Asp Gly Phe
Phe Ala Thr Ile Pro Gly Glu Asp Ala Glu Thr Ile Lys Lys Arg Ala
Met Glu Phe Leu Lys Tyr Ile Asn Ala Lys Leu Pro Gly Ala Leu Glu
Leu Glu Tyr Glu Asp Phe Tyr Arg Arg Gly Phe Phe Val Thr Lys Lys
Lys Tyr Ala Val Ile Asp Glu Glu Gly Lys Ile Thr Thr Arg Gly Leu
Glu Ile Val Arg Arg Asp Trp Ser Glu Ile Ala Lys Glu Thr Gln Ala
Arg Val Leu Glu Ala Leu Leu Lys Asp Gly Asp Val Glu Glu Ala Val
Ser Ile Val Lys Glu Val Thr Glu Lys Leu Ser Lys Tyr Glu Val Pro
Pro Glu Lys Leu Val Ile His Glu Gln Ile Thr Arg Glu Leu Lys Asp
Tyr Lys Ala Thr Gly Pro His Val Ala Ile Ala Lys Arg Leu Ala Ala
Arg Gly Val Lys Ile Arg Pro Gly Thr Val Ile Ser Tyr Ile Val Leu
Lys Gly Ser Gly Arg Ile Gly Asp Arg Ala Ile Pro Phe Asp Glu Phe
Asp Pro Thr Lys His Lys Tyr Asp Ala Glu Tyr Tyr Ile Glu Asn Gln
Val Leu Pro Ala Val Glu Arg Ile Leu Lys Ala Phe Gly Tyr Arg Gly
Glu Glu Leu Arg Tyr Gln Lys Thr Arg Gln Val Gly Leu Gly Ala Trp
Leu Lys Pro Lys Gly Lys Gly

SEQ ID NO: 7 - polypeptide sequence of DNA polymerase from *Thermococcus kodakarensis*

Met Ile Leu Asp Thr Asp Tyr Ile Thr Glu Asp Gly Lys Pro Val Ile
Arg Ile Phe Lys Lys Glu Asn Gly Glu Phe Lys Ile Glu Tyr Asp Arg
Thr Phe Glu Pro Tyr Phe Tyr Ala Leu Leu Lys Asp Asp Ser Ala Ile
Glu Glu Val Lys Lys Ile Thr Ala Glu Arg His Gly Thr Val Val Thr
Val Lys Arg Val Glu Lys Val Gln Lys Lys Phe Leu Gly Arg Pro Val
Glu Val Trp Lys Leu Tyr Phe Thr His Pro Gln Asp Val Pro Ala Ile
Arg Asp Lys Ile Arg Glu His Pro Ala Val Ile Asp Ile Tyr Glu Tyr
Asp Ile Pro Phe Ala Lys Arg Tyr Leu Ile Asp Lys Gly Leu Val Pro
Met Glu Gly Asp Glu Glu Leu Lys Met Leu Ala Phe Asp Ile Glu Thr
Leu Tyr Glu Glu Gly Glu Glu Phe Ala Glu Gly Pro Ile Leu Met Ile
Ser Tyr Ala Asp Glu Glu Gly Ala Arg Val Ile Thr Trp Lys Asn Val
Asp Leu Pro Tyr Val Asp Val Val Ser Thr Glu Arg Glu Met Ile Lys
Arg Phe Leu Arg Val Val Lys Glu Lys Asp Pro Asp Val Leu Ile Thr
Tyr Asn Gly Asp Asn Phe Asp Phe Ala Tyr Leu Lys Lys Arg Cys Glu
Lys Leu Gly Ile Asn Phe Ala Leu Gly Arg Asp Gly Ser Glu Pro Lys
Ile Gln Arg Met Gly Asp Arg Phe Ala Val Glu Val Lys Gly Arg Ile
His Phe Asp Leu Tyr Pro Val Ile Arg Arg Thr Ile Asn Leu Pro Thr
Tyr Thr Leu Glu Ala Val Tyr Glu Ala Val Phe Gly Gln Pro Lys Glu
Lys Val Tyr Ala Glu Glu Ile Thr Thr Ala Trp Glu Thr Gly Glu Asn
Leu Glu Arg Val Ala Arg Tyr Ser Met Glu Asp Ala Lys Val Thr Tyr
Glu Leu Gly Lys Glu Phe Leu Pro Met Glu Ala Gln Leu Ser Arg Leu
Ile Gly Gln Ser Leu Trp Asp Val Ser Arg Ser Ser Thr Gly Asn Leu
Val Glu Trp Phe Leu Leu Arg Lys Ala Tyr Glu Arg Asn Glu Leu Ala
Pro Asn Lys Pro Asp Glu Lys Glu Leu Ala Arg Arg Arg Gln Ser Tyr
Glu Gly Gly Tyr Val Lys Glu Pro Glu Arg Gly Leu Trp Glu Asn Ile
Val Tyr Leu Asp Phe Arg Ser Leu Tyr Pro Ser Ile Ile Ile Thr His
Asn Val Ser Pro Asp Thr Leu Asn Arg Glu Gly Cys Lys Glu Tyr Asp
Val Ala Pro Gln Val Gly His Arg Phe Cys Lys Asp Phe Pro Gly Phe
Ile Pro Ser Leu Leu Gly Asp Leu Leu Glu Glu Arg Gln Lys Ile Lys
Lys Lys Met Lys Ala Thr Ile Asp Pro Ile Glu Arg Lys Leu Leu Asp
Tyr Arg Gln Arg Ala Ile Lys Ile Leu Ala Asn Ser Tyr Tyr Gly Tyr
Tyr Gly Tyr Ala Arg Ala Arg Trp Tyr Cys Lys Glu Cys Ala Glu Ser
Val Thr Ala Trp Gly Arg Glu Tyr Ile Thr Met Thr Ile Lys Glu Ile
Glu Glu Lys Tyr Gly Phe Lys Val Ile Tyr Ser Asp Thr Asp Gly Phe
Phe Ala Thr Ile Pro Gly Ala Asp Ala Glu Thr Val Lys Lys Lys Ala
Met Glu Phe Leu Lys Tyr Ile Asn Ala Lys Leu Pro Gly Ala Leu Glu
Leu Glu Tyr Glu Gly Phe Tyr Glu Arg Gly Phe Phe Val Thr Lys Lys
Lys Tyr Ala Val Ile Asp Glu Glu Gly Lys Ile Thr Thr Arg Gly Leu
Glu Ile Val Arg Arg Asp Trp Ser Glu Ile Ala Lys Glu Thr Gln Ala
Arg Val Leu Glu Ala Leu Leu Lys Asp Gly Asp Val Glu Lys Ala Val
Arg Ile Val Lys Glu Val Thr Glu Lys Leu Ser Lys Tyr Glu Val Pro
Pro Glu Lys Leu Val Ile His Glu Gln Ile Thr Arg Asp Leu Lys Asp
Tyr Lys Ala Thr Gly Pro His Val Ala Val Ala Lys Arg Leu Ala Ala
Arg Gly Val Lys Ile Arg Pro Gly Thr Val Ile Ser Tyr Ile Val Leu
Lys Gly Ser Gly Arg Ile Gly Asp Arg Ala Ile Pro Phe Asp Glu Phe
Asp Pro Thr Lys His Lys Tyr Asp Ala Glu Tyr Tyr Ile Glu Asn Gln
Val Leu Pro Ala Val Glu Arg Ile Leu Arg Ala Phe Gly Tyr Arg Lys
Glu Asp Leu Arg Tyr Gln Lys Thr Arg Gln Val Gly Leu Ser Ala Trp
Leu Lys Pro Lys Gly Thr

SAMPLE TAG SEQUENCES

SEQ ID Number	Sample tag sequence
8	TAGAATTGAAGAA
9	TGGCCATAGCTAC
10	GTCATCTGCGACC
11	TTCGCGCTTGGAC
12	CGCGAACCGTTAG
13	TTGCAGCCTCTAA
14	TCTACTAGTACGA
15	GTAGGTTCTACTG
16	GCCAATATCAAGT
17	CTATCTTGCTGGT
18	GTTCTCATAGGTA
19	GTCTATGAACCAA
20	CGGAGCGCTTATT
21	TATGCCATGAGGA
22	ATACGACTCGGAG
23	GATGGAACTCAGC
24	GGACCTGCATGAA
25	TAGACTGGAACTT
26	GAATTACCTCGTT
27	AGGATCAGGCTAC
28	ACGCGTAGAAGAG
29	CTTCGAGACTTAC
30	GACGGCTAACTCC
31	TTAGCATTCTCTT

32	GCAAGGCATAGTA
33	ACCTAGATATGGA
34	ACGCCAAGGCGTA
35	TATGACGGATCCG
36	CCTCCATTAGAGA
37	ATTGAATACTCTG
38	GAGATGAGAAGAA
39	TCTGAGTAGCCGG
40	AATAGGTAGTACG
41	GTCGAAGAAGTCC
42	TACTGCATCTCGT
43	GACGTATTAGAGC
44	CCTGCATTATTCG
45	ACGAATGATGCTC
46	TACTAGCAGAGAT
47	CTCCTCATCTTCC
48	TCCTCTGCGCTGC
49	CCTTCTCAGTCCG
50	CAGCTTCATAGCG
51	TTGACTCTCGCGC
52	TATCCTGAGCGAT
53	AACGCCTAGCCGA
54	CCGAAGACGTCAT
55	GAGTTCTCCAGAT
56	TGCATCCGCGCTT
57	CCTGAACTCAAGT
58	GGTCGTATGCGTA

59	AGGCCTCTCTACC
60	GTACTCCATCCAA
61	CAGCGGACGCGCT
62	ATCTCTCTTAGCA
63	AAGCAATAATAAT
64	AAGGCGACTCCGA
65	ACGTCTCTAGGAG
66	CCATCAGACCTCT
67	ACTTAATCGTACT
68	TGGAATTCTCCAA
69	CCATACGATCAGG
70	TTATGGAGCAATA
71	GCTCGGCGTTCGA
72	TTGGCCAGTCGCT
73	CAGATACGTAGAG
74	AATGCTATTATCC
75	GCAGCATGCCGAT
76	GGAGAGTTACCTC
77	GAGAGTCCATGAT
78	CAATCTATTCTGA
79	GCTCTTAGTATCC
80	CCATAGTTATGGT
81	TGCGAGATCGAAG
82	AGAGAAGTCGAGT
83	GGTAACTCCATAT
84	TGCTATTCCAGGC
85	AACCGCGAGGCTC

86	TTCTAGAGATACC
87	TTCGCTCAAGTAT
88	CAGAGAAGGCGCA
89	TAGAATTGGCCTC
90	GGCCATTCTCCAG
91	TCCAACGCGCGTT
92	GCCGCAGATTACG
93	GCAGTTCGAACGC
94	TTCTCTCTGCAGG
95	TAAGCTACCAGCG
96	CTGCATGAGGTTG
97	TTGCCTAGCGAGG
98	CAACTGAATTAGG
99	AAGCGGTCCTCTT
100	AATGGAAGGACCG
101	GAGTTAGTAAGTT
102	TTCCTAATTCCAA
103	GTTCTGGTTCGCT
104	GTTCATCTCTTCC
105	ATTCCGAGGAAGA
106	CTTAGCCGAGAGA
107	GTCTGCTACGCTT
108	ATGGCGCCGCGCA
109	TAATTGGTTATCT
110	TCGGTTATAAGTC
111	TGCCTGAGAACGT
112	AGATGCGGTTAAC

113	ATGGAATAGGCGA
114	AGAGATGCGATCG
115	CTCCAATAACGT
116	GCCTTGCTACTGG
117	CTTCGTCTCTACG
118	ACGCTCATAGCCT
119	GTCGAAGATAAGG
120	GCCGGAGTCCTCG
121	TATACGGCGACCT
122	AGGTAGATATTCG
123	TTAAGGTACTGCT
124	CGGATCTGGTATA
125	GAGGTCTCGGAGG
126	GGCATCGATGGAC
127	GATCTCCGATATA
128	GATTCGGAATACT
129	CTGCGATCCGGCC
130	GATCCGGTTGCAA
131	CGTCAGGCTTGAC
132	TCGGCAAGGCGAG
133	GAACGGCGAACGC
134	CCTCAAGCGGACT
135	GAAGCCAGATGGT
136	TGCTCATACCAAT

FIGURE 4

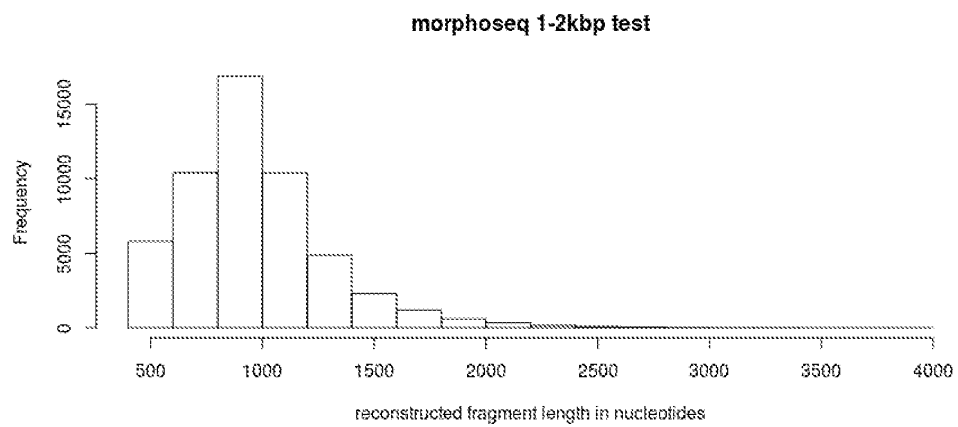
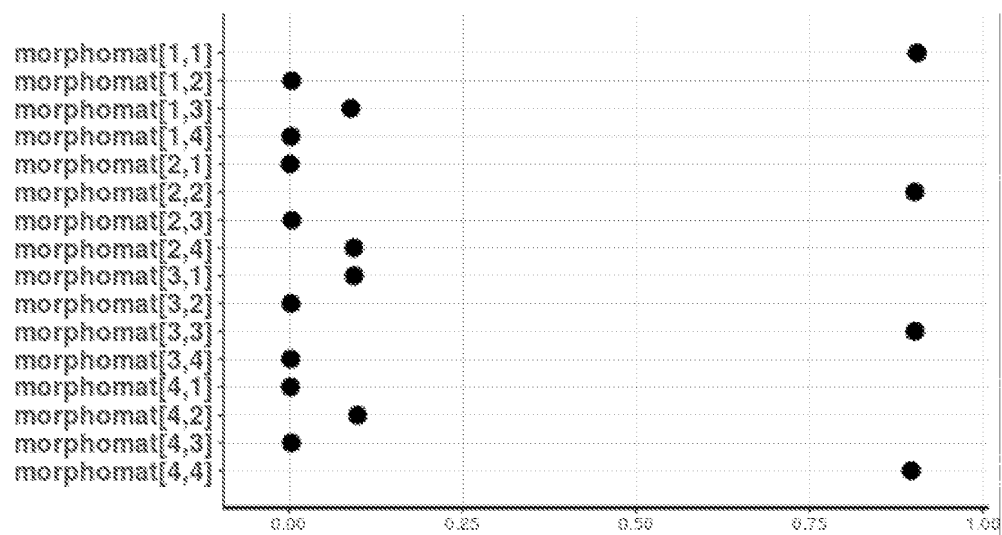


FIGURE 5

A



B

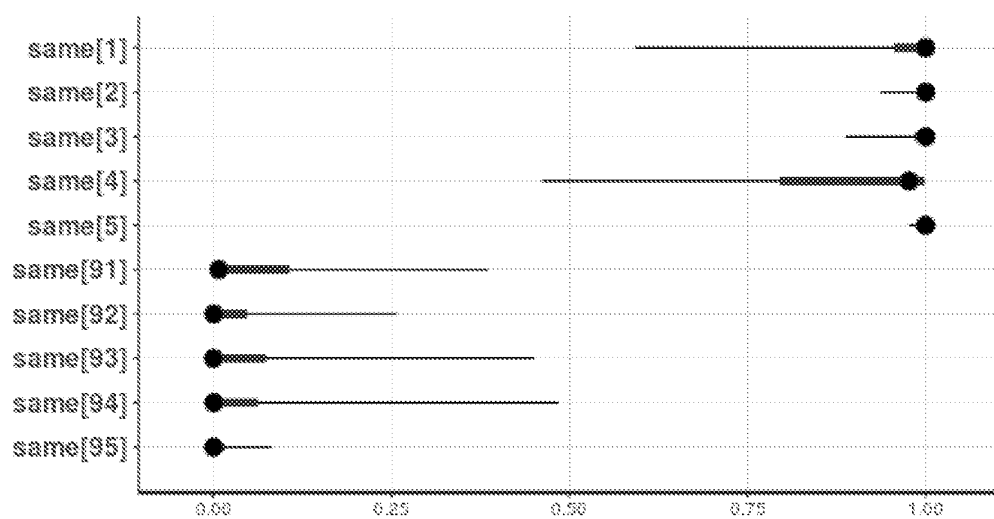


Figure 6

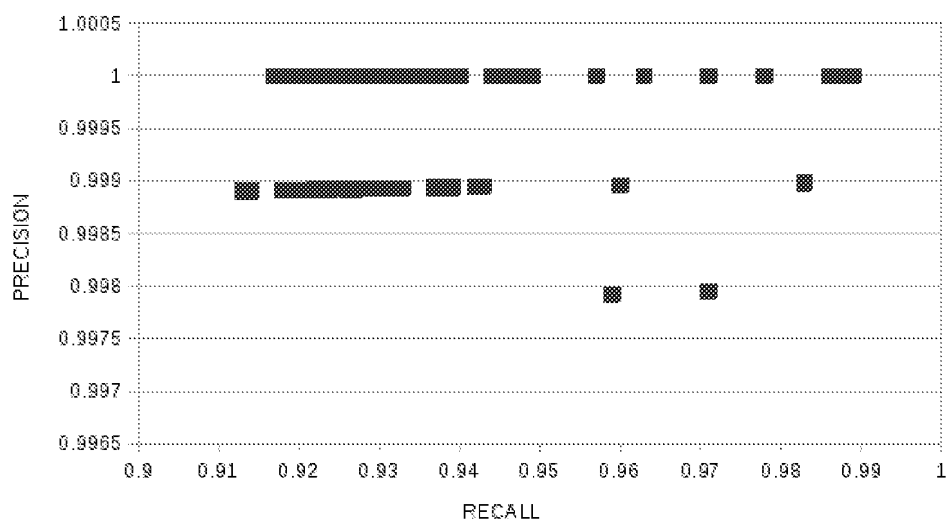


Figure 7

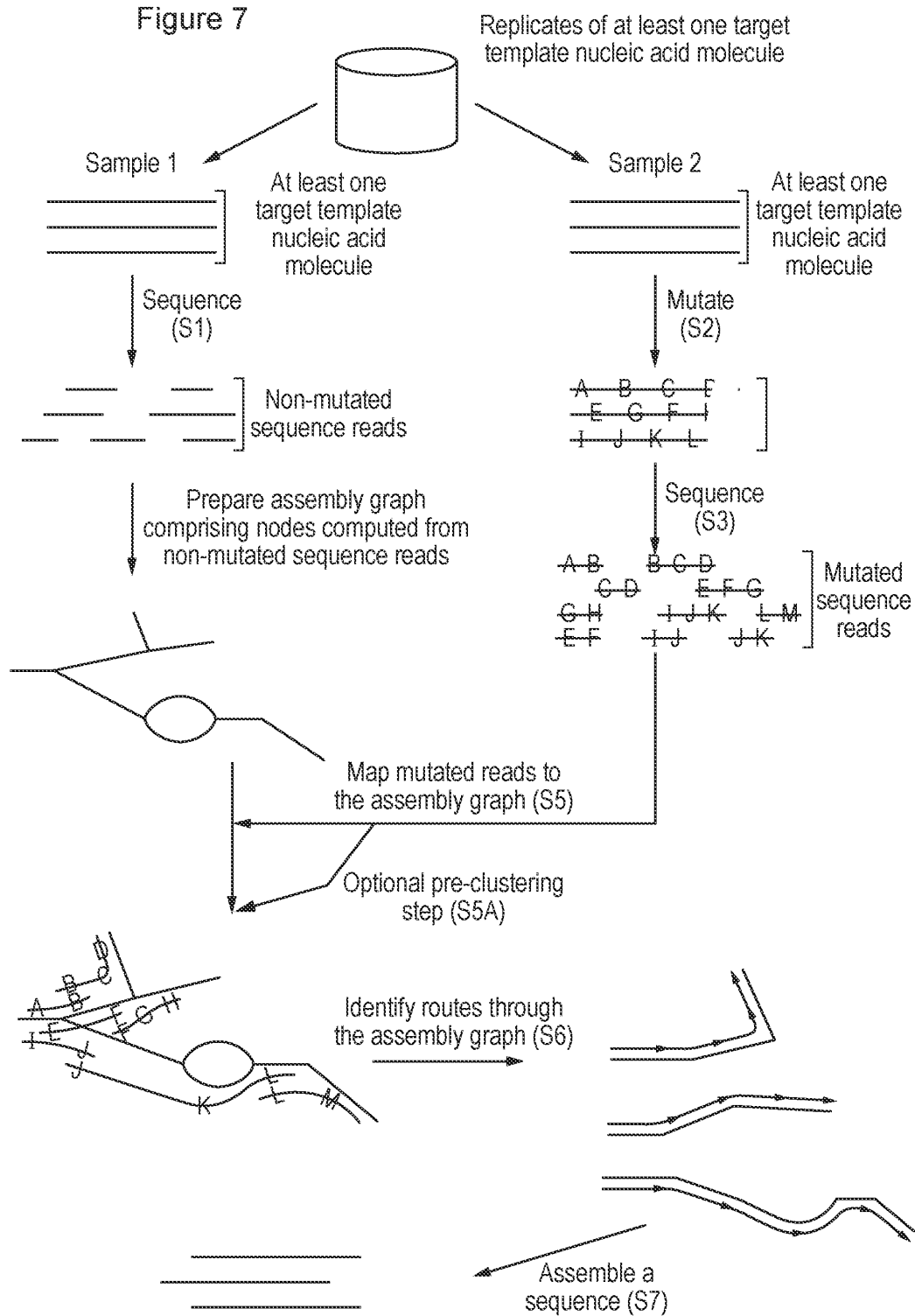


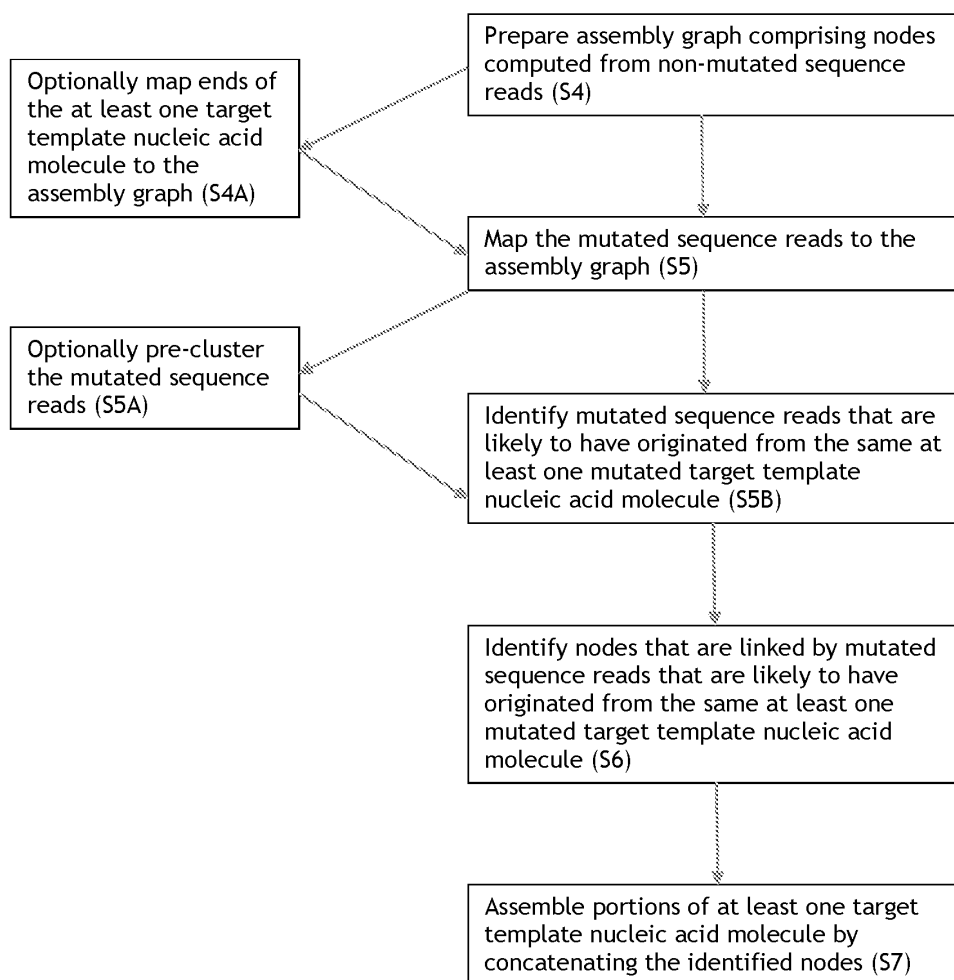
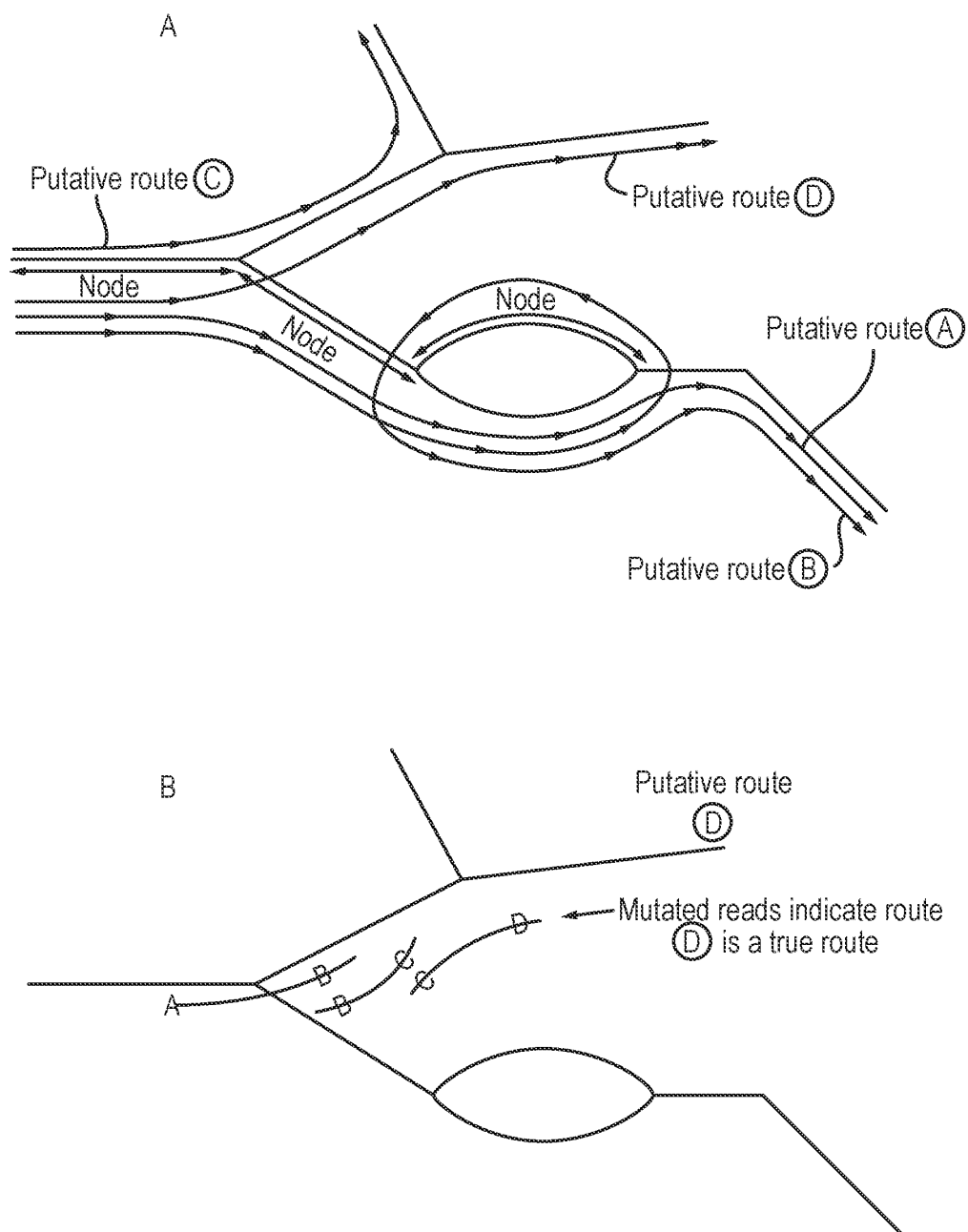
Figure 8

Figure 9



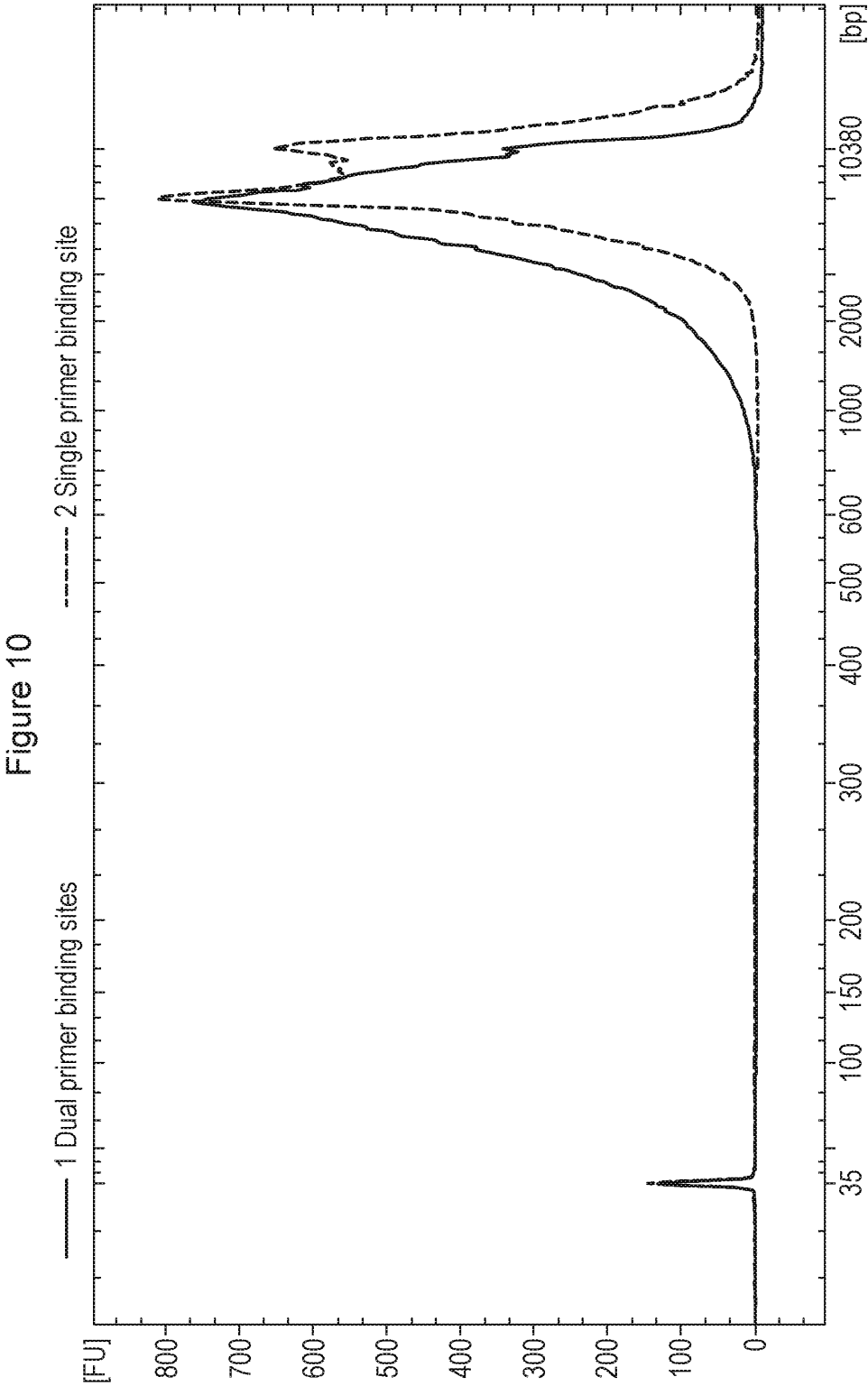


Figure 11

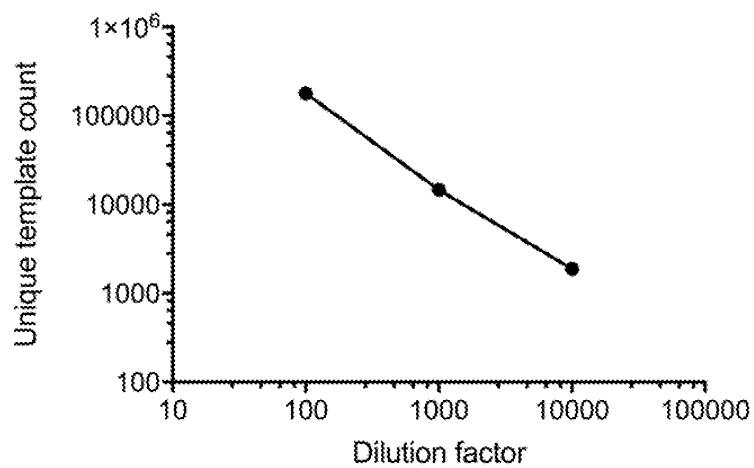
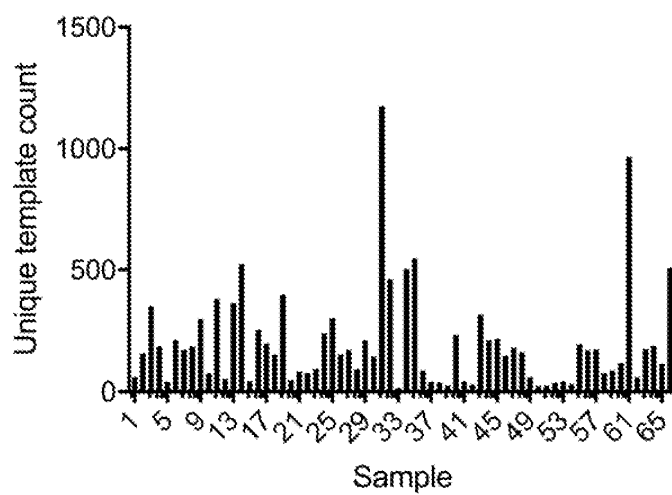


Figure 12

A



B

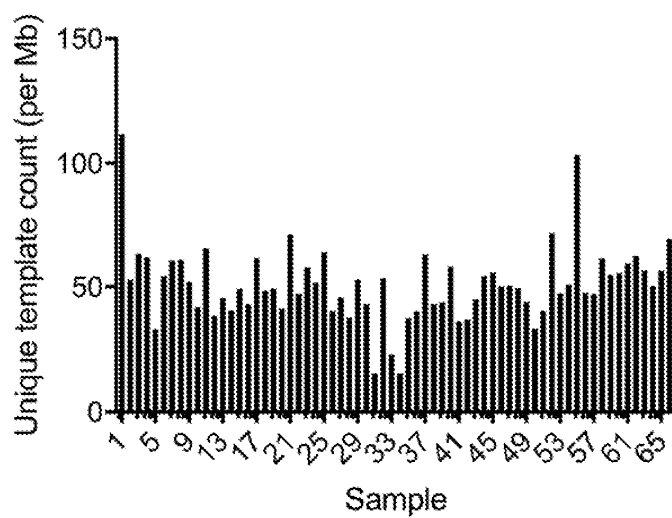


Figure 13

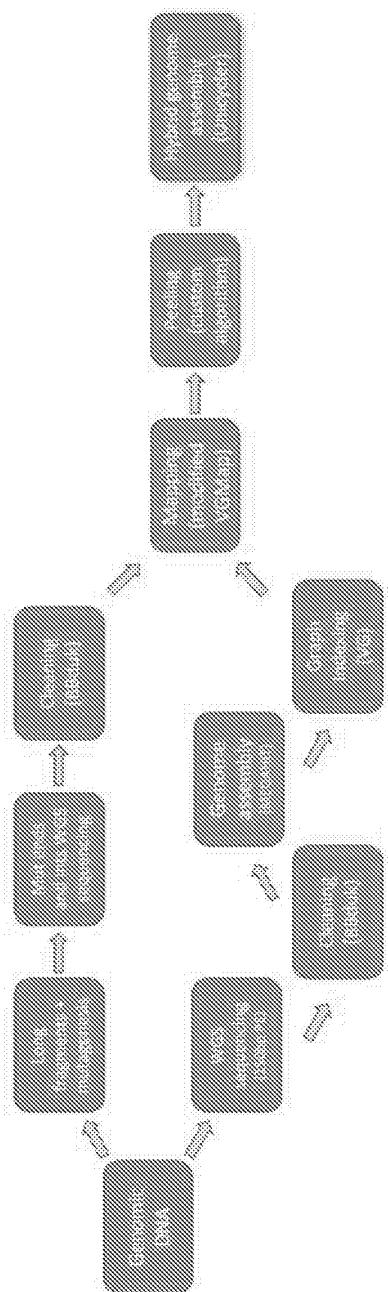


Figure 14

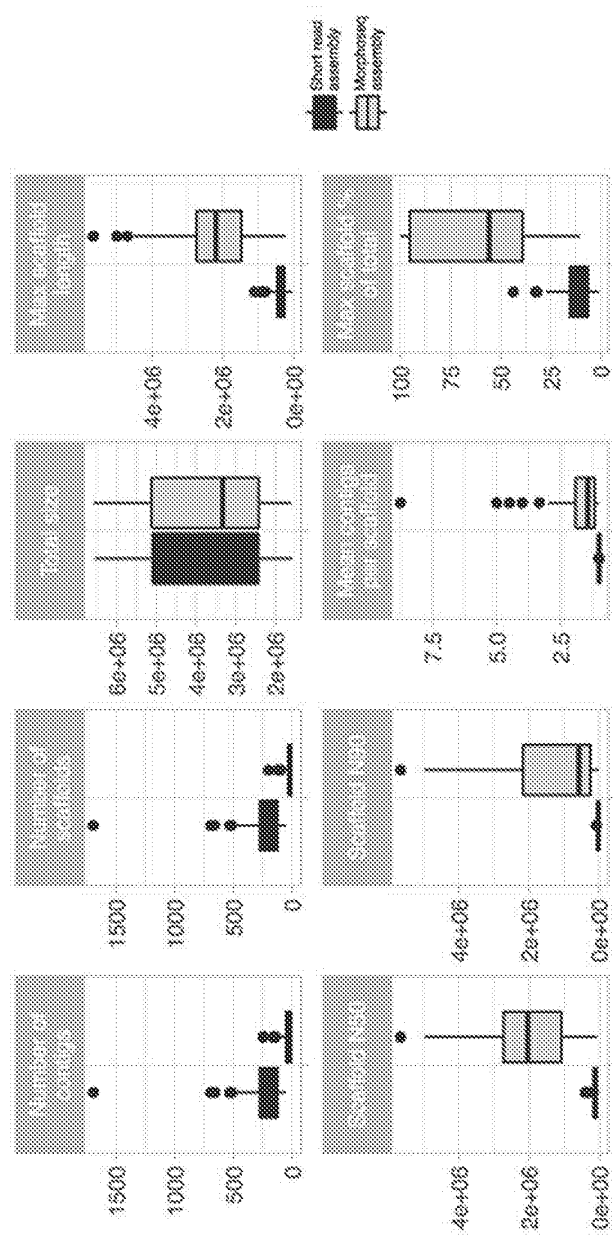


Figure 15

C03: *Arcobacter butzleri*, Strain JV22

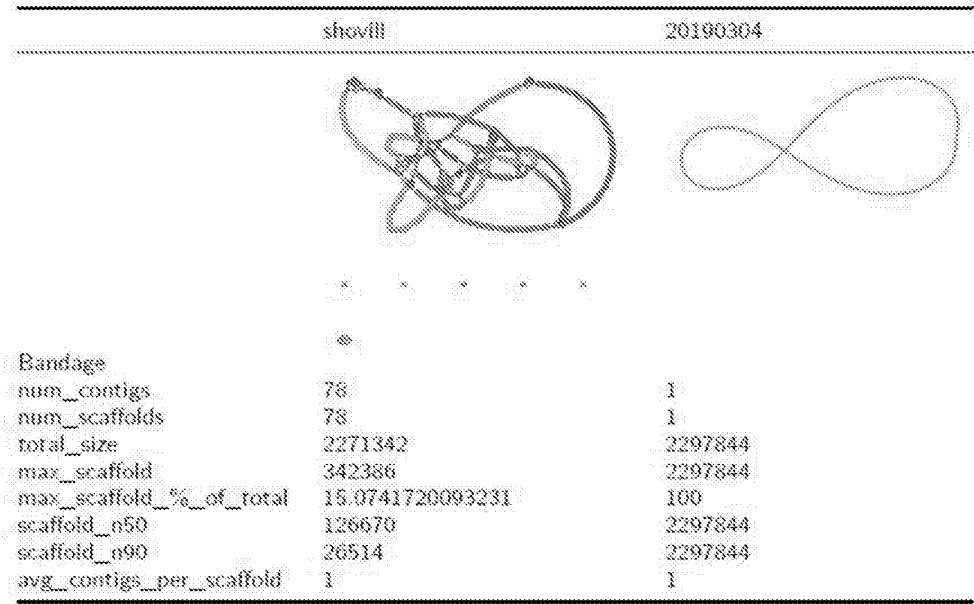


Figure 16

