List of 3

$ dna\_segs :List of 4

..$ BB:Classes ‘dna\_seg’ and 'data.frame': 1283 obs. of 17 variables:

.. ..$ name : chr [1:1283] "BARBAKC583\_0001" "BARBAKC583\_0003" "polA" "dnaQ" ...

.. ..$ start : num [1:1283] 213 1105 1970 5177 5886 ...

.. ..$ end : num [1:1283] 986 2004 4876 5881 6488 ...

.. ..$ strand : num [1:1283] 1 1 -1 -1 -1 -1 -1 -1 1 1 ...

.. ..$ length : int [1:1283] 257 299 968 234 200 291 198 279 421 435 ...

.. ..$ pid : int [1:1283] 121602380 121602196 121601792 121602632 121602047 121602531 121601838 121601741 121602564 121602914 ...

.. ..$ gene : chr [1:1283] "-" "-" "polA" "dnaQ" ...

.. ..$ synonym : chr [1:1283] "BARBAKC583\_0001" "BARBAKC583\_0003" "BARBAKC583\_0002" "BARBAKC583\_0004" ...

.. ..$ code : chr [1:1283] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:1283] "COG0670R" "COG3568R" "COG0258L,COG0749L" "COG0847L" ...

.. ..$ product : chr [1:1283] "hypothetical protein" "endonuclease/exonuclease/phosphatase family protein" "DNA polymerase I" "DNA polymerase III, epsilon subunit" ...

.. ..$ col : chr [1:1283] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:1283] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:1283] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:1283] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:1283] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:1283] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella bacilliformis KC583, complete genome - 1..1445021"

..$ BG:Classes ‘dna\_seg’ and 'data.frame': 1737 obs. of 17 variables:

.. ..$ name : chr [1:1737] "Bgr\_00010" "maf1" "aroE" "coaE" ...

.. ..$ start : num [1:1737] 2 839 1428 2297 2886 ...

.. ..$ end : num [1:1737] 826 1435 2300 2881 3593 ...

.. ..$ strand : num [1:1737] 1 1 1 1 1 1 -1 -1 -1 -1 ...

.. ..$ length : int [1:1737] 274 198 290 194 235 969 287 257 167 289 ...

.. ..$ pid : int [1:1737] 240849683 240849684 240849685 240849686 240849687 240849688 240849689 240849690 240849691 240849692 ...

.. ..$ gene : chr [1:1737] "-" "maf1" "aroE" "coaE" ...

.. ..$ synonym : chr [1:1737] "Bgr\_00010" "Bgr\_00020" "Bgr\_00030" "Bgr\_00040" ...

.. ..$ code : chr [1:1737] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:1737] "COG1806S" "COG0424D" "COG0169E" "COG0237H" ...

.. ..$ product : chr [1:1737] "hypothetical protein" "Maf-like protein" "shikimate 5-dehydrogenase" "dephospho-CoA kinase" ...

.. ..$ col : chr [1:1737] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:1737] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:1737] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:1737] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:1737] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:1737] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella grahamii as4aup, complete genome - 1..2341328"

..$ BH:Classes ‘dna\_seg’ and 'data.frame': 1488 obs. of 17 variables:

.. ..$ name : chr [1:1488] "BH00010" "maf-1" "aroE" "coaE" ...

.. ..$ start : num [1:1488] 1 837 1426 2304 2896 ...

.. ..$ end : num [1:1488] 825 1433 2307 2891 3603 ...

.. ..$ strand : num [1:1488] 1 1 1 1 1 1 -1 -1 -1 -1 ...

.. ..$ length : int [1:1488] 274 198 293 195 235 968 293 257 613 163 ...

.. ..$ pid : int [1:1488] 49474832 49474833 49474834 49474835 49474836 49474837 49474838 49474839 49474840 49474841 ...

.. ..$ gene : chr [1:1488] "-" "maf-1" "aroE" "coaE" ...

.. ..$ synonym : chr [1:1488] "BH00010" "BH00020" "BH00030" "BH00040" ...

.. ..$ code : chr [1:1488] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:1488] "COG1806S" "COG0424D" "COG0169E" "COG0237H" ...

.. ..$ product : chr [1:1488] "hypothetical protein" "septum formation maf protein" "shikimate 5-dehydrogenase" "dephospho-CoA kinase" ...

.. ..$ col : chr [1:1488] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:1488] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:1488] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:1488] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:1488] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:1488] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella henselae str. Houston-1, complete genome - 1..1931047"

..$ BQ:Classes ‘dna\_seg’ and 'data.frame': 1142 obs. of 17 variables:

.. ..$ name : chr [1:1142] "BQ00010" "maf-1" "aroE" "coaE" ...

.. ..$ start : num [1:1142] 1 840 1429 2307 2899 ...

.. ..$ end : num [1:1142] 843 1436 2310 2894 3606 ...

.. ..$ strand : num [1:1142] 1 1 1 1 1 1 -1 -1 -1 -1 ...

.. ..$ length : int [1:1142] 280 198 293 195 235 968 295 257 167 278 ...

.. ..$ pid : int [1:1142] 49473689 49473690 49473691 49473692 49473693 49473694 49473695 49473696 49473697 49473698 ...

.. ..$ gene : chr [1:1142] "-" "maf-1" "aroE" "coaE" ...

.. ..$ synonym : chr [1:1142] "BQ00010" "BQ00020" "BQ00030" "BQ00040" ...

.. ..$ code : chr [1:1142] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:1142] "COG1806S" "COG0424D" "COG0169E" "COG0237H" ...

.. ..$ product : chr [1:1142] "hypothetical protein" "septum formation maf protein" "shikimate 5-dehydrogenase" "dephospho-CoA kinase" ...

.. ..$ col : chr [1:1142] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:1142] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:1142] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:1142] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:1142] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:1142] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella quintana str. Toulouse, complete genome - 1..1581384"

$ comparisons:List of 3

..$ :Classes ‘comparison’ and 'data.frame': 347 obs. of 13 variables:

.. ..$ start1 : int [1:347] 835268 1111820 253895 1111820 253895 1108279 257433 1108279 257433 1112395 ...

.. ..$ end1 : int [1:347] 835362 1111897 253972 1111897 253972 1108359 257513 1108359 257513 1113934 ...

.. ..$ start2 : int [1:347] 1161724 1751850 1751927 1896741 1896818 1748230 1748310 1893121 1893201 1752731 ...

.. ..$ end2 : int [1:347] 1161818 1751927 1751850 1896818 1896741 1748310 1748230 1893201 1893121 1754268 ...

.. ..$ name1 : chr [1:347] "gi|121601635|ref|NC\_008783.1|" "gi|121601635|ref|NC\_008783.1|" "gi|121601635|ref|NC\_008783.1|" "gi|121601635|ref|NC\_008783.1|" ...

.. ..$ name2 : chr [1:347] "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" ...

.. ..$ per\_id : num [1:347] 100 100 100 100 100 ...

.. ..$ aln\_len : int [1:347] 95 78 78 78 78 81 81 81 81 1543 ...

.. ..$ mism : int [1:347] 0 0 0 0 0 1 1 1 1 25 ...

.. ..$ gaps : int [1:347] 0 0 0 0 0 0 0 0 0 6 ...

.. ..$ e\_value : num [1:347] 2e-41 7e-32 7e-32 7e-32 7e-32 ...

.. ..$ bit\_score: num [1:347] 176 145 145 145 145 145 145 145 145 2660 ...

.. ..$ direction: num [1:347] 1 1 -1 1 -1 1 -1 1 -1 1 ...

..$ :Classes ‘comparison’ and 'data.frame': 873 obs. of 13 variables:

.. ..$ start1 : int [1:873] 1595789 1221054 1752170 1897061 1752170 1897061 1748228 1893119 1748228 1893119 ...

.. ..$ end1 : int [1:873] 1595817 1221081 1752291 1897182 1752291 1897182 1751594 1896485 1751594 1896485 ...

.. ..$ start2 : int [1:873] 1746699 957541 1412678 1412678 1582687 1582687 1408678 1408678 1578687 1578687 ...

.. ..$ end2 : int [1:873] 1746727 957514 1412799 1412799 1582808 1582808 1412058 1412058 1582067 1582067 ...

.. ..$ name1 : chr [1:873] "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" "gi|240849682|ref|NC\_012846.1|" ...

.. ..$ name2 : chr [1:873] "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" ...

.. ..$ per\_id : num [1:873] 100 100 96.7 96.7 96.7 ...

.. ..$ aln\_len : int [1:873] 29 28 122 122 122 122 3396 3396 3396 3396 ...

.. ..$ mism : int [1:873] 0 0 4 4 4 4 81 81 81 81 ...

.. ..$ gaps : int [1:873] 0 0 0 0 0 0 27 27 27 27 ...

.. ..$ e\_value : num [1:873] 2e-04 6e-04 1e-49 1e-49 1e-49 ...

.. ..$ bit\_score: num [1:873] 54.7 52.8 204 204 204 ...

.. ..$ direction: num [1:873] 1 -1 1 1 1 1 1 1 1 1 ...

..$ :Classes ‘comparison’ and 'data.frame': 375 obs. of 13 variables:

.. ..$ start1 : int [1:375] 1746699 1408679 1578688 1408679 1578688 1413050 1583059 1021378 704515 1156757 ...

.. ..$ end1 : int [1:375] 1746727 1412362 1582371 1412362 1582371 1415115 1585123 1021568 705703 1157941 ...

.. ..$ start2 : int [1:375] 1076176 1172922 1172922 1291636 1291636 1295958 1177244 622772 967804 854344 ...

.. ..$ end2 : int [1:375] 1076204 1176604 1176604 1295318 1295318 1298027 1179312 622581 966616 855528 ...

.. ..$ name1 : chr [1:375] "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" "gi|49474831|ref|NC\_005956.1|" ...

.. ..$ name2 : chr [1:375] "gi|49473688|ref|NC\_005955.1|" "gi|49473688|ref|NC\_005955.1|" "gi|49473688|ref|NC\_005955.1|" "gi|49473688|ref|NC\_005955.1|" ...

.. ..$ per\_id : num [1:375] 100 95.3 95.3 95.3 95.3 ...

.. ..$ aln\_len : int [1:375] 29 3715 3715 3715 3715 2094 2093 192 1192 1188 ...

.. ..$ mism : int [1:375] 0 111 111 111 111 72 72 13 86 87 ...

.. ..$ gaps : int [1:375] 0 47 47 47 47 45 45 1 6 6 ...

.. ..$ e\_value : num [1:375] 1e-04 0e+00 0e+00 0e+00 0e+00 ...

.. ..$ bit\_score: num [1:375] 54.7 5838 5838 5838 5838 ...

.. ..$ direction: num [1:375] 1 1 1 1 1 1 1 -1 -1 1 ...

$ rnt\_segs :List of 4

..$ BB:Classes ‘dna\_seg’ and 'data.frame': 51 obs. of 17 variables:

.. ..$ name : chr [1:51] "BARBAKC583\_0046" "BARBAKC583\_0184" "BARBAKC583\_0198" "rrsB" ...

.. ..$ start : num [1:51] 50798 191477 201823 251900 253697 ...

.. ..$ end : num [1:51] 50872 191561 201897 253371 253773 ...

.. ..$ strand : num [1:51] -1 1 -1 1 1 1 1 1 1 -1 ...

.. ..$ length : int [1:51] 75 85 75 1472 77 76 2820 119 77 76 ...

.. ..$ pid : int [1:51] 121601635 121601635 121601635 121601635 121601635 121601635 121601635 121601635 121601635 121601635 ...

.. ..$ gene : chr [1:51] "-" "-" "-" "rrsB" ...

.. ..$ synonym : chr [1:51] "BARBAKC583\_0046" "BARBAKC583\_0184" "BARBAKC583\_0198" "BARBAKC583\_0258" ...

.. ..$ code : chr [1:51] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:51] "-" "-" "-" "-" ...

.. ..$ product : chr [1:51] "Gly tRNA" "Leu tRNA" "Thr tRNA" "16S ribosomal RNA" ...

.. ..$ col : chr [1:51] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:51] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:51] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:51] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:51] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:51] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella bacilliformis KC583, complete genome - 1..1445021"

..$ BG:Classes ‘dna\_seg’ and 'data.frame': 49 obs. of 17 variables:

.. ..$ name : chr [1:49] "trnA" "trnR" "trnS" "trnS" ...

.. ..$ start : num [1:49] 102378 174534 181427 186980 400662 ...

.. ..$ end : num [1:49] 102453 174610 181516 187069 400737 ...

.. ..$ strand : num [1:49] -1 -1 -1 1 -1 -1 1 1 1 1 ...

.. ..$ length : int [1:49] 76 77 90 90 76 76 77 75 83 84 ...

.. ..$ pid : int [1:49] 240849682 240849682 240849682 240849682 240849682 240849682 240849682 240849682 240849682 240849682 ...

.. ..$ gene : chr [1:49] "trnA" "trnR" "trnS" "trnS" ...

.. ..$ synonym : chr [1:49] "Bgr\_00760" "Bgr\_01340" "Bgr\_01380" "Bgr\_01420" ...

.. ..$ code : chr [1:49] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:49] "-" "-" "-" "-" ...

.. ..$ product : chr [1:49] "Ala tRNA" "Arg tRNA" "Ser tRNA" "Ser tRNA" ...

.. ..$ col : chr [1:49] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:49] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:49] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella grahamii as4aup, complete genome - 1..2341328"

..$ BH:Classes ‘dna\_seg’ and 'data.frame': 54 obs. of 17 variables:

.. ..$ name : chr [1:54] "BH00970" "BH01340" "BH01380" "BH01420" ...

.. ..$ start : num [1:54] 131572 177534 184164 189669 359730 ...

.. ..$ end : num [1:54] 131647 177610 184253 189758 359805 ...

.. ..$ strand : num [1:54] 1 -1 -1 1 -1 -1 1 1 1 1 ...

.. ..$ length : int [1:54] 76 77 90 90 76 76 77 75 83 84 ...

.. ..$ pid : int [1:54] 49474831 49474831 49474831 49474831 49474831 49474831 49474831 49474831 49474831 49474831 ...

.. ..$ gene : chr [1:54] "-" "-" "-" "-" ...

.. ..$ synonym : chr [1:54] "BH00970" "BH01340" "BH01380" "BH01420" ...

.. ..$ code : chr [1:54] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:54] "-" "-" "-" "-" ...

.. ..$ product : chr [1:54] "Anticodon: GGC" "Anticodon: ACG" "Anticodon: CGA" "Anticodon: GGA" ...

.. ..$ col : chr [1:54] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:54] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:54] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:54] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:54] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:54] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella henselae str. Houston-1, complete genome - 1..1931047"

..$ BQ:Classes ‘dna\_seg’ and 'data.frame': 49 obs. of 17 variables:

.. ..$ name : chr [1:49] "BQ00900" "BQ01270" "BQ01310" "BQ01350" ...

.. ..$ start : num [1:49] 121933 164223 170853 176396 336295 ...

.. ..$ end : num [1:49] 122010 164301 170944 176487 336370 ...

.. ..$ strand : num [1:49] 1 -1 -1 1 -1 -1 1 1 1 -1 ...

.. ..$ length : int [1:49] 78 79 92 92 76 78 79 77 83 92 ...

.. ..$ pid : int [1:49] 49473688 49473688 49473688 49473688 49473688 49473688 49473688 49473688 49473688 49473688 ...

.. ..$ gene : chr [1:49] "-" "-" "-" "-" ...

.. ..$ synonym : chr [1:49] "BQ00900" "BQ01270" "BQ01310" "BQ01350" ...

.. ..$ code : chr [1:49] "-" "-" "-" "-" ...

.. ..$ cog : chr [1:49] "-" "-" "-" "-" ...

.. ..$ product : chr [1:49] "Anticodon: GGC" "Anticodon: ACG" "Anticodon: CGA" "Anticodon: GGA" ...

.. ..$ col : chr [1:49] "blue" "blue" "blue" "blue" ...

.. ..$ lty : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ lwd : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ pch : num [1:49] 8 8 8 8 8 8 8 8 8 8 ...

.. ..$ cex : num [1:49] 1 1 1 1 1 1 1 1 1 1 ...

.. ..$ gene\_type: chr [1:49] "arrows" "arrows" "arrows" "arrows" ...

.. ..- attr(\*, "seg\_name")= chr "Bartonella quintana str. Toulouse, complete genome - 1..1581384"