

Supplemental_file_3 corresponds to page 79-81.

Summary statistics of the *de novo* genome assembly, and sequence alignment in the 31 Kb ARG3 genomic region. The data corresponds to figure 21e.

[a] A snapshot of the statistical summary to the *de novo* genome assembly of the ARG3 resistant parent IS18760.

Graph size		Node sizes	
Node count:	789,660	N50:	12,941 bp
Edge count:	0	Shortest node:	128 bp
Edge overlaps:	n/a	Lower quartile node:	137 bp
Total length:	663,276,242 bp	Median node:	168 bp
Total length (no overlaps):	663,276,242 bp	Upper quartile node:	273 bp
		Longest node:	312,510 bp
Graph connectivity		Depth	
Dead ends:	1,579,320	Median depth:	16.1x
Percentage dead ends:	100.00%	Estimated sequence length:	1,511,793,681 bp
Connected components:	789,660		
Largest component:	312,510 bp (0.05%)		
Total length orphaned nodes:	663,276,242 bp (100.00%)		

[b] A snapshot of the statistical summary to the *de novo* genome assembly of the ARG3 resistant pooled-progeny sample.

 Graph information ? ✕

File name: C:/Users/Demeke/Documents/thesis1/Project2_ARG3/ARG3_genomeAssembly/ARG3rPOOL_scaffolds.fasta

Graph size		Node sizes	
Node count:	1,436,654	N50:	3,629 bp
Edge count:	0	Shortest node:	128 bp
Edge overlaps:	n/a	Lower quartile node:	137 bp
Total length:	833,441,000 bp	Median node:	173 bp
Total length (no overlaps):	833,441,000 bp	Upper quartile node:	283 bp
		Longest node:	155,219 bp

Graph connectivity		Depth	
Dead ends:	2,873,308	Median depth:	15.3x
Percentage dead ends:	100.00%	Estimated sequence length:	2,214,285,841 bp
Connected components:	1,436,654		
Largest component:	155,219 bp (0.02%)		
Total length orphaned nodes:	833,441,000 bp (100.00%)		

[c] A snapshot of the statistical summary to the *de novo* genome assembly of the ARG3 susceptible parent TAM428. The TAM428 genome resequencing was carried out before ARG2 and ARG3 studies were initiated and the sequence quality and coverage were low [as compared to IS18760 and the pooled samples] as shown in the assembly statistics. Accordingly, the desired assembly node from TAM428 was not only small but also not reliable. Thus, we opt to not use the sequence information obtained from TAM428 *de novo* genome assembly. In addition, the susceptible pooled-progeny genome of ARG3 mapping population failed to complete the *de novo* genome assembly. However, analysis of the BAM files of TAM428 with the ARG2 and ARG3 pooled-progeny genomes that had TAM428 as a common susceptible parent [via IGV] showed reliable information that the 31 KB ARG3 genomic region has identical sequences in TAM428 and BTx623.

 Graph information


File name: C:/Users/Demeke/Documents/thesis1/Project2_ARG3/ARG3_genomeAssembly/TAM428_scaffolds.fasta

Graph size

 Node count:	165,097
 Edge count:	0
 Edge overlaps:	n/a
 Total length:	316,595,751 bp
 Total length (no overlaps):	316,595,751 bp

Graph connectivity

 Dead ends:	330,194
 Percentage dead ends:	100.00%
 Connected components:	165,097
 Largest component:	51,462 bp (0.02%)
 Total length orphaned nodes:	316,595,751 bp (100.00%)

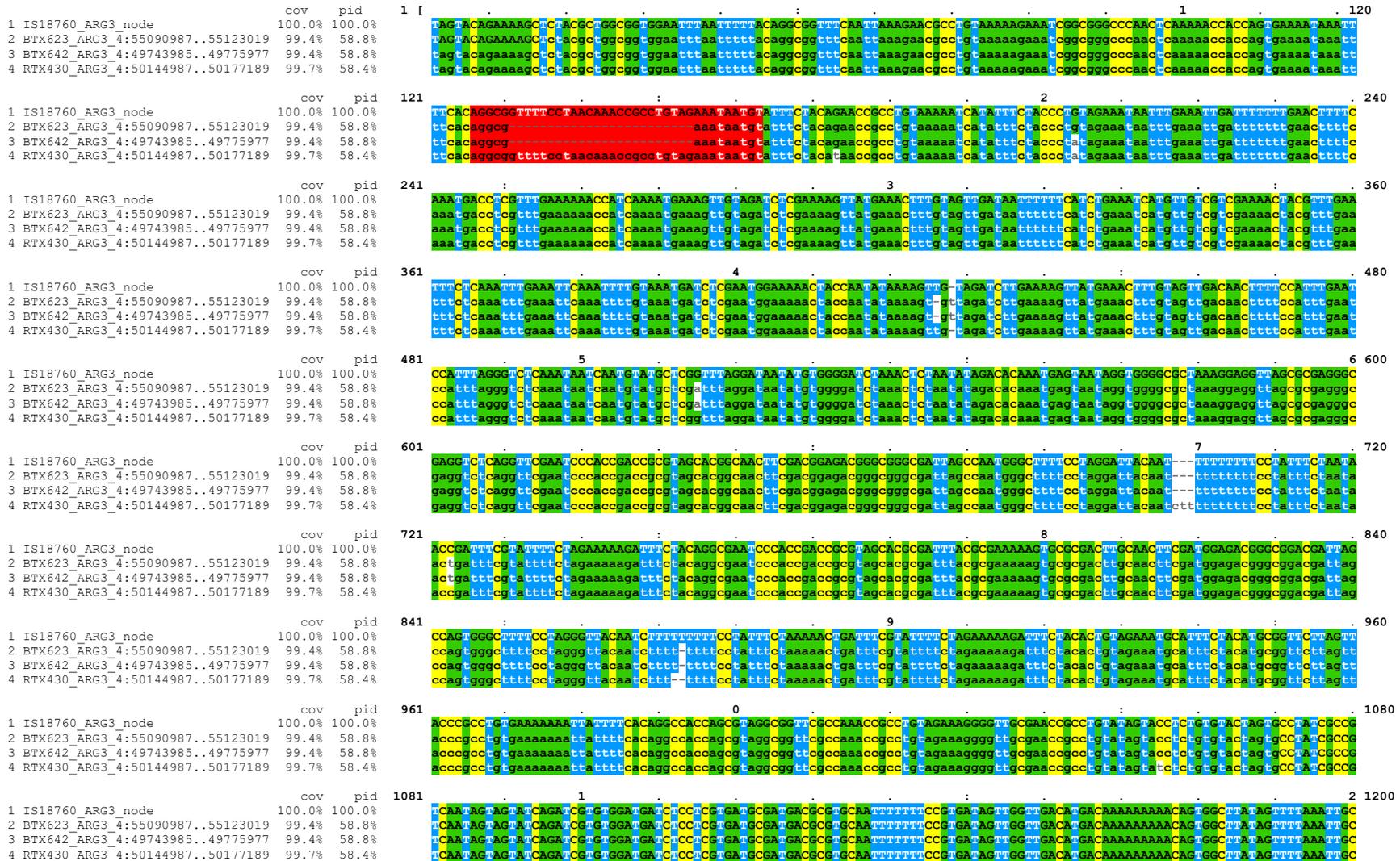
Node sizes

 N50:	5,823 bp
 Shortest node:	78 bp
 Lower quartile node:	220 bp
 Median node:	629 bp
 Upper quartile node:	2,096 bp
 Longest node:	51,462 bp

Depth

 Median depth:	4.03x
 Estimated sequence length:	1,013,245,340 bp

[d] The sequences alignment below shows the 31 Kb ARG3 genomic region in IS18760 as compared to the three S. bicolor reference genomes that carry defined genomic boundaries. Part of the sequence in the SbiRio reference genome was not determined as stated in the results part and figure 3e. The red shaded sequences around the beginning and the end of the alignment shows the indel size-markers that were used to determine the 31 Kb ARG3 genomic region via recombination analyses as shown in figure 3d and 3e.



	cov	pid	2101	3	1320
1 IS18760_ARG3_node	100.0%	100.0%	CTAGTTTTGTCGGCGACGCA TTTGAGCCACCCACAGGTTACAGTTTAGGCACCCGATTTTAAATTTTAACTTCTCCGGT		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CTAGTTTTGTCGGCGACGCA TTTGAGCCACCCACAGGTTACAGTTTAGGCACCCGATTTTAAATTTTAACTTCTCCGGT		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CTAGTTTTGTCGGCGACGCA TTTGAGCCACCCACAGGTTACAGTTTAGGCACCCGATTTTAAATTTTAACTTCTCCGGT		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CTAGTTTTGTCGGCGACGCA TTTGAGCCACCCACAGGTTACAGTTTAGGCACCCGATTTTAAATTTTAACTTCTCCGGT		
	cov	pid	1321	4	1440
1 IS18760_ARG3_node	100.0%	100.0%	CTGCATTCAGTTCACAAATTCATGGCTGCGAGCCGTGATGGAAATTTAGTAGCCAGATCATTCCTGTGCAATCCATTTCCATGATGAGCCATATCTTTTCCGCTTTTCTCTAATAC		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CTGCATTCAGTTCACAAATTCATGGCTGCGAGCCGTGATGGAAATTTAGTAGCCAGATCATTCCTGTGCAATCCATTTCCATGATGAGCCATATCTTTTCCGCTTTTCTCTAATAC		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CTGCATTCAGTTCACAAATTCATGGCTGCGAGCCGTGATGGAAATTTAGTAGCCAGATCATTCCTGTGCAATCCATTTCCATGATGAGCCATATCTTTTCCGCTTTTCTCTAATAC		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CTGCATTCAGTTCACAAATTCATGGCTGCGAGCCGTGATGGAAATTTAGTAGCCAGATCATTCCTGTGCAATCCATTTCCATGATGAGCCATATCTTTTCCGCTTTTCTCTAATAC		
	cov	pid	1441	5	1560
1 IS18760_ARG3_node	100.0%	100.0%	CTGAATCTTTTCAGAGTAGATGCTGCCAAATTCACAGGACCTTCAGCCACGACGCCCTTCCCTGTGAGCTTTTCTTAACTTCACAAAGCTTTGCTCTTCGCAAAATTCACCTTTTGG		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CTGAATCTTTTCAGAGTAGATGCTGCCAAATTCACAGGACCTTCAGCCACGACGCCCTTCCCTGTGAGCTTTTCTTAACTTCACAAAGCTTTGCTCTTCGCAAAATTCACCTTTTGG		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CTGAATCTTTTCAGAGTAGATGCTGCCAAATTCACAGGACCTTCAGCCACGACGCCCTTCCCTGTGAGCTTTTCTTAACTTCACAAAGCTTTGCTCTTCGCAAAATTCACCTTTTGG		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CTGAATCTTTTCAGAGTAGATGCTGCCAAATTCACAGGACCTTCAGCCACGACGCCCTTCCCTGTGAGCTTTTCTTAACTTCACAAAGCTTTGCTCTTCGCAAAATTCACCTTTTGG		
	cov	pid	1561	6	1680
1 IS18760_ARG3_node	100.0%	100.0%	ATAGTATTTCAATCCCTGCTATAAAGGTAATACCTGGGCCCATGACACTTCCATCACCTCGACATAGGTAATAGGTTCAACCTAGAAAAGCCCCATATTTGATGAACTCTACCTTTTGG		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ATAGTATTTCAATCCCTGCTATAAAGGTAATACCTGGGCCCATGACACTTCCATCACCTCGACATAGGTAATAGGTTCAACCTAGAAAAGCCCCATATTTGATGAACTCTACCTTTTGG		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ATAGTATTTCAATCCCTGCTATAAAGGTAATACCTGGGCCCATGACACTTCCATCACCTCGACATAGGTAATAGGTTCAACCTAGAAAAGCCCCATATTTGATGAACTCTACCTTTTGG		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ATAGTATTTCAATCCCTGCTATAAAGGTAATACCTGGGCCCATGACACTTCCATCACCTCGACATAGGTAATAGGTTCAACCTAGAAAAGCCCCATATTTGATGAACTCTACCTTTTGG		
	cov	pid	1681	7	1800
1 IS18760_ARG3_node	100.0%	100.0%	AAGTATCCAAATGACCCGTCATATTAAGGACCCCCACATAAAGCAGAAACACACAGCAAAGGAGGACCTTCGCCCTGGCACCACAAACTAGATCAGTGCCTTACCCGCTTC		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	AAGTATCCAAATGACCCGTCATATTAAGGACCCCCACATAAAGCAGAAACACACAGCAAAGGAGGACCTTCGCCCTGGCACCACAAACTAGATCAGTGCCTTACCCGCTTC		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	AAGTATCCAAATGACCCGTCATATTAAGGACCCCCACATAAAGCAGAAACACACAGCAAAGGAGGACCTTCGCCCTGGCACCACAAACTAGATCAGTGCCTTACCCGCTTC		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	AAGTATCCAAATGACCCGTCATATTAAGGACCCCCACATAAAGCAGAAACACACAGCAAAGGAGGACCTTCGCCCTGGCACCACAAACTAGATCAGTGCCTTACCCGCTTC		
	cov	pid	1801	9	1920
1 IS18760_ARG3_node	100.0%	100.0%	CGGTTGGCTATGGCGCCCTCGTGGCTTCATAAAAAATGGCCACCTTTTTCGCGTATCCACCCGCGCCCTTAACTGCTTCCGTTCCGCCACCTGGGACGATCTCAGGAGGAGGC		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CGGTTGGCTATGGCGCCCTCGTGGCTTCATAAAAAATGGCCACCTTTTTCGCGTATCCACCCGCGCCCTTAACTGCTTCCGTTCCGCCACCTGGGACGATCTCAGGAGGAGGC		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CGGTTGGCTATGGCGCCCTCGTGGCTTCATAAAAAATGGCCACCTTTTTCGCGTATCCACCCGCGCCCTTAACTGCTTCCGTTCCGCCACCTGGGACGATCTCAGGAGGAGGC		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CGGTTGGCTATGGCGCCCTCGTGGCTTCATAAAAAATGGCCACCTTTTTCGCGTATCCACCCGCGCCCTTAACTGCTTCCGTTCCGCCACCTGGGACGATCTCAGGAGGAGGC		
	cov	pid	1921	0	2040
1 IS18760_ARG3_node	100.0%	100.0%	AACCTTGAATCTTCTGGCTGGCTGACGCTTTGGGGTTGTGACCGGATCTGCGATATAGTGGCCCTACAGGCCAGTTCCAGTGGCGGGACCTTCCCTTGGTGCCTCAACGATGGTCAA		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	AACCTTGAATCTTCTGGCTGGCTGACGCTTTGGGGTTGTGACCGGATCTGCGATATAGTGGCCCTACAGGCCAGTTCCAGTGGCGGGACCTTCCCTTGGTGCCTCAACGATGGTCAA		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	AACCTTGAATCTTCTGGCTGGCTGACGCTTTGGGGTTGTGACCGGATCTGCGATATAGTGGCCCTACAGGCCAGTTCCAGTGGCGGGACCTTCCCTTGGTGCCTCAACGATGGTCAA		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	AACCTTGAATCTTCTGGCTGGCTGACGCTTTGGGGTTGTGACCGGATCTGCGATATAGTGGCCCTACAGGCCAGTTCCAGTGGCGGGACCTTCCCTTGGTGCCTCAACGATGGTCAA		
	cov	pid	2041	1	2160
1 IS18760_ARG3_node	100.0%	100.0%	CAACATAGCAATCTGGTTCCTTGGACGATGCTGGTGGGGTTATCCCCCGGATCAGTCCCAACCTCAGTGGGAAGCCCGTTGAGGCCCTTTCCTCAATCTTTGTCGGATCTGAGTGA		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CAACATAGCAATCTGGTTCCTTGGACGATGCTGGTGGGGTTATCCCCCGGATCAGTCCCAACCTCAGTGGGAAGCCCGTTGAGGCCCTTTCCTCAATCTTTGTCGGATCTGAGTGA		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CAACATAGCAATCTGGTTCCTTGGACGATGCTGGTGGGGTTATCCCCCGGATCAGTCCCAACCTCAGTGGGAAGCCCGTTGAGGCCCTTTCCTCAATCTTTGTCGGATCTGAGTGA		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CAACATAGCAATCTGGTTCCTTGGACGATGCTGGTGGGGTTATCCCCCGGATCAGTCCCAACCTCAGTGGGAAGCCCGTTGAGGCCCTTTCCTCAATCTTTGTCGGATCTGAGTGA		
	cov	pid	2161	2	2280
1 IS18760_ARG3_node	100.0%	100.0%	AAGCATAGTACGCTTTTACCGGTCCTGCAGCGACCGTCTCCTCAGAGCTTTTCTCCCTTGAAGACCTAGCCTTAGGAGGTCCTCAATAGGTCATGGAGTCTGATCTCCGCAATCTT		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	AAGCATAGTACGCTTTTACCGGTCCTGCAGCGACCGTCTCCTCAGAGCTTTTCTCCCTTGAAGACCTAGCCTTAGGAGGTCCTCAATAGGTCATGGAGTCTGATCTCCGCAATCTT		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	AAGCATAGTACGCTTTTACCGGTCCTGCAGCGACCGTCTCCTCAGAGCTTTTCTCCCTTGAAGACCTAGCCTTAGGAGGTCCTCAATAGGTCATGGAGTCTGATCTCCGCAATCTT		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	AAGCATAGTACGCTTTTACCGGTCCTGCAGCGACCGTCTCCTCAGAGCTTTTCTCCCTTGAAGACCTAGCCTTAGGAGGTCCTCAATAGGTCATGGAGTCTGATCTCCGCAATCTT		
	cov	pid	2281	3	2400
1 IS18760_ARG3_node	100.0%	100.0%	CAACAGTGGTCTCTCTCCGCTGGGGATTTCTGTTGCCAGTTCCAGTATATGGTCTCCAAATCCAGTCTTCTCTTTTATAGTTATAGTGCCTTTTGGAGGAGGTCGATGCTT		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	CAACAGTGGTCTCTCTCCGCTGGGGATTTCTGTTGCCAGTTCCAGTATATGGTCTCCAAATCCAGTCTTCTCTTTTATAGTTATAGTGCCTTTTGGAGGAGGTCGATGCTT		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	CAACAGTGGTCTCTCTCCGCTGGGGATTTCTGTTGCCAGTTCCAGTATATGGTCTCCAAATCCAGTCTTCTCTTTTATAGTTATAGTGCCTTTTGGAGGAGGTCGATGCTT		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	CAACAGTGGTCTCTCTCCGCTGGGGATTTCTGTTGCCAGTTCCAGTATATGGTCTCCAAATCCAGTCTTCTCTTTTATAGTTATAGTGCCTTTTGGAGGAGGTCGATGCTT		
	cov	pid	2401	5	2520
1 IS18760_ARG3_node	100.0%	100.0%	GGTTTACCGACTTGGTGGCAGAGCTCAGTCAACTTTGGATTTGTTCTTCAACTAGTGGATTTGGTGGTTCCTTAGGTTTTCCTTACCCATTTTATGAGATTTCTCTTTTG		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	GGTTTACCGACTTGGTGGCAGAGCTCAGTCAACTTTGGATTTGTTCTTCAACTAGTGGATTTGGTGGTTCCTTAGGTTTTCCTTACCCATTTTATGAGATTTCTCTTTTG		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	GGTTTACCGACTTGGTGGCAGAGCTCAGTCAACTTTGGATTTGTTCTTCAACTAGTGGATTTGGTGGTTCCTTAGGTTTTCCTTACCCATTTTATGAGATTTCTCTTTTG		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	GGTTTACCGACTTGGTGGCAGAGCTCAGTCAACTTTGGATTTGTTCTTCAACTAGTGGATTTGGTGGTTCCTTAGGTTTTCCTTACCCATTTTATGAGATTTCTCTTTTG		
	cov	pid	2521	6	2640
1 IS18760_ARG3_node	100.0%	100.0%	GAGGAGATTCATGAAAAAGCATGAAATTTTTCATGATGAGCATTTGAAGATTTATATTTCTTTTAGGTTTATCTTTTGGAGGAGCGAGGAGATCTAGCCCTTAGGTCCTATGCTT		
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	GAGGAGATTCATGAAAAAGCATGAAATTTTTCATGATGAGCATTTGAAGATTTATATTTCTTTTAGGTTTATCTTTTGGAGGAGCGAGGAGATCTAGCCCTTAGGTCCTATGCTT		
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	GAGGAGATTCATGAAAAAGCATGAAATTTTTCATGATGAGCATTTGAAGATTTATATTTCTTTTAGGTTTATCTTTTGGAGGAGCGAGGAGATCTAGCCCTTAGGTCCTATGCTT		
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	GAGGAGATTCATGAAAAAGCATGAAATTTTTCATGATGAGCATTTGAAGATTTATATTTCTTTTAGGTTTATCTTTTGGAGGAGCGAGGAGATCTAGCCCTTAGGTCCTATGCTT		

2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

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 aaaaggatttattbaaaaatctttttbaatbaaataatattgatcttttgatattbaaaatttagtactcaagtttbaAGAAAATAgatcttgtttagttttcttcaaaat
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cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

6961 0 7080
 TTACCCCTTTAAATATTTGGACCGATGCAATAAATTTAAATATTCCTCTCAATGAAAAAANCTAGAGGGTTGCGGTAACTTTCGCCAGCAGCCCAATACCCGAAATGGC
 TTACCCCTTTAAATATTTGGACCGATGCAATAAATTTAAATATTCCTCTCAATGAAAAAANCTAGAGGGTTGCGGTAACTTTCGCCAGCAGCCCAATACCCGAAATGGC
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 ttactcccccattbaaaattttggagcagtgcaataaattbaaatactctctcaatgaaaaaaacttagaggggtctgcggtAACTTTCGCCAGCAGCCCAATACCCGAAATGGC

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7081 1 7200
 ACGGAGACCCGAAAAAGAAAAGTAACTACCTACGCAATACCTCAACCCCAACCGGATCAGCTTTCGCAAGTGGCATGCTTAGACATGGGAGCATCTCAAACTCTGAAATACAGTCAAA
 ACGGAGACCCGAAAAAGAAAAGTAACTACCTACGCAATACCTCAACCCCAACCGGATCAGCTTTCGCAAGTGGCATGCTTAGACATGGGAGCATCTCAAACTCTGAAATACAGTCAAA
 ACGGAGACCCGAAAAAGAAAAGTAACTACCTACGCAATACCTCAACCCCAACCGGATCAGCTTTCGCAAGTGGCATGCTTAGACATGGGAGCATCTCAAACTCTGAAATACAGTCAAA
 ACGGAGACCCGAAAAAGAAAAGTAACTACCTACGCAATACCTCAACCCCAACCGGATCAGCTTTCGCAAGTGGCATGCTTAGACATGGGAGCATCTCAAACTCTGAAATACAGTCAAA

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7201 3 7320
 ACACGTACGAGAGTATCGGTCTCACACCGTCTGGGACATTTCCAAATCAAAACGCGTTCCTCAAGCTGCACACGGCATCGCCATCGACAAACGACGTCACAGTCTTGCAGAGTT
 ACACGTACGAGAGTATCGGTCTCACACCGTCTGGGACATTTCCAAATCAAAACGCGTTCCTCAAGCTGCACACGGCATCGCCATCGACAAACGACGTCACAGTCTTGCAGAGTT
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cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7321 4 7440
 CCAAACTCAGCTCTCAAACTTTTTTACTTGAAAAAAATTCACCAAAACATCTAGATTAATTCACACGCTTCCACACCTGATCAGTTTGCCTAATCTAAAGTAAAAAAGTCTGGGGAAG
 CCAAACTCAGCTCTCAAACTTTTTTACTTGAAAAAAATTCACCAAAACATCTAGATTAATTCACACGCTTCCACACCTGATCAGTTTGCCTAATCTAAAGTAAAAAAGTCTGGGGAAG
 CCAAACTCAGCTCTCAAACTTTTTTACTTGAAAAAAATTCACCAAAACATCTAGATTAATTCACACGCTTCCACACCTGATCAGTTTGCCTAATCTAAAGTAAAAAAGTCTGGGGAAG
 CCAAACTCAGCTCTCAAACTTTTTTACTTGAAAAAAATTCACCAAAACATCTAGATTAATTCACACGCTTCCACACCTGATCAGTTTGCCTAATCTAAAGTAAAAAAGTCTGGGGAAG

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7441 5 7560
 AAAAAGAAAAGTAGAAAAGGCTTTCTCAGCAATGTAAGAGAGAAATAAATAAAAAAGAGAAGTAGACTTGAATTGATGAAAATGACATGGTTTATTCTATCAATTTTAGTCTCT
 AAAAAGAAAAGTAGAAAAGGCTTTCTCAGCAATGTAAGAGAGAAATAAATAAAAAAGAGAAGTAGACTTGAATTGATGAAAATGACATGGTTTATTCTATCAATTTTAGTCTCT
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cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7561 6 7680
 CACCTCAATTTAAATTTTCAGGAGAGGATCTTTTGGCTACGCAAGAGCAAAATTTGCCCTGGGTGATGCTGAGTCCAGGCCAATAGCCGCTTGGAACTCACCCAAATTTA
 CACCTCAATTTAAATTTTCAGGAGAGGATCTTTTGGCTACGCAAGAGCAAAATTTGCCCTGGGTGATGCTGAGTCCAGGCCAATAGCCGCTTGGAACTCACCCAAATTTA
 CACCTCAATTTAAATTTTCAGGAGAGGATCTTTTGGCTACGCAAGAGCAAAATTTGCCCTGGGTGATGCTGAGTCCAGGCCAATAGCCGCTTGGAACTCACCCAAATTTA
 CACCTCAATTTAAATTTTCAGGAGAGGATCTTTTGGCTACGCAAGAGCAAAATTTGCCCTGGGTGATGCTGAGTCCAGGCCAATAGCCGCTTGGAACTCACCCAAATTTA

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7681 7 7800
 AAAAATAATGACAGAGGCGCCCTGCAATTTGCAATTTCAATTTGAGAAAGCGTCAAGTGAACCGGGAATCTCACTGAAATTTATTTTGTCCAAACCTTTTTTTTAACTCAAAAT
 AAAAATAATGACAGAGGCGCCCTGCAATTTGCAATTTCAATTTGAGAAAGCGTCAAGTGAACCGGGAATCTCACTGAAATTTATTTTGTCCAAACCTTTTTTTTAACTCAAAAT
 AAAAATAATGACAGAGGCGCCCTGCAATTTGCAATTTCAATTTGAGAAAGCGTCAAGTGAACCGGGAATCTCACTGAAATTTATTTTGTCCAAACCTTTTTTTTAACTCAAAAT
 AAAAATAATGACAGAGGCGCCCTGCAATTTGCAATTTCAATTTGAGAAAGCGTCAAGTGAACCGGGAATCTCACTGAAATTTATTTTGTCCAAACCTTTTTTTTAACTCAAAAT

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
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 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7801 9 7920
 ATCATCTAATATGACTTAATCTTAAACTTTGCTTTATCAACAGGAGTGTGTCGGGTAGTTTGGTGAACCTGCAACAGTTTCTAAACCAAGGTGAGTTTCTAAACCAACCGGA
 ATCATCTAATATGACTTAATCTTAAACTTTGCTTTATCAACAGGAGTGTGTCGGGTAGTTTGGTGAACCTGCAACAGTTTCTAAACCAAGGTGAGTTTCTAAACCAACCGGA
 ATCATCTAATATGACTTAATCTTAAACTTTGCTTTATCAACAGGAGTGTGTCGGGTAGTTTGGTGAACCTGCAACAGTTTCTAAACCAAGGTGAGTTTCTAAACCAACCGGA
 ATCATCTAATATGACTTAATCTTAAACTTTGCTTTATCAACAGGAGTGTGTCGGGTAGTTTGGTGAACCTGCAACAGTTTCTAAACCAAGGTGAGTTTCTAAACCAACCGGA

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

7921 0 8040
 GTATACATCCCTCAAACTGGAGTATACATCCCTCAAAATTTCTCCCGCCAAACCCAGCTTCCCCCCCCCGATGGATCCGTCGCCACCAGGGACAGGGAGGAGCCTA
 GTATACATCCCTCAAACTGGAGTATACATCCCTCAAAATTTCTCCCGCCAAACCCAGCTTCCCCCCCCCGATGGATCCGTCGCCACCAGGGACAGGGAGGAGCCTA
 GTATACATCCCTCAAACTGGAGTATACATCCCTCAAAATTTCTCCCGCCAAACCCAGCTTCCCCCCCCCGATGGATCCGTCGCCACCAGGGACAGGGAGGAGCCTA
 GTATACATCCCTCAAACTGGAGTATACATCCCTCAAAATTTCTCCCGCCAAACCCAGCTTCCCCCCCCCGATGGATCCGTCGCCACCAGGGACAGGGAGGAGCCTA

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

8041 1 8160
 GAGCCCAGAACCCGCGCTTCCCCGACCCGACAGCCAGAGACCTCCCGATCGGAAAGCGAGGGAATCCCCTCCACCCGCGCCCTCCCTCCCTGCGCCAGCAGCCTCACTGAGGGAAGG
 GAGCCCAGAACCCGCGCTTCCCCGACCCGACAGCCAGAGACCTCCCGATCGGAAAGCGAGGGAATCCCCTCCACCCGCGCGCCCTCCCTCCCTGCGCCAGCAGCCTCACTGAGGGAAGG
 GAGCCCAGAACCCGCGCTTCCCCGACCCGACAGCCAGAGACCTCCCGATCGGAAAGCGAGGGAATCCCCTCCACCCGCGCGCCCTCCCTCCCTGCGCCAGCAGCCTCACTGAGGGAAGG
 GAGCCCAGAACCCGCGCTTCCCCGACCCGACAGCCAGAGACCTCCCGATCGGAAAGCGAGGGAATCCCCTCCACCCGCGCGCCCTCCCTCCCTGCGCCAGCAGCCTCACTGAGGGAAGG

cov pid
 1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

8161 2 8280
 GATCCCAATGCCTGTGCTTTTCAGCAGGTGGGCTGGCAGGTTAGGCGCTCACTGCTCAATCCAGCATTCACCGTCTCAACGCGCTAGCTGGAATAGGGACGACGATGATG
 GATCCCAATGCCTGTGCTTTTCAGCAGGTGGGCTGGCAGGTTAGGCGCTCACTGCTCAATCCAGCATTCACCGTCTCAACGCGCTAGCTGGAATAGGGACGACGATGATG
 GATCCCAATGCCTGTGCTTTTCAGCAGGTGGGCTGGCAGGTTAGGCGCTCACTGCTCAATCCAGCATTCACCGTCTCAACGCGCTAGCTGGAATAGGGACGACGATGATG
 GATCCCAATGCCTGTGCTTTTCAGCAGGTGGGCTGGCAGGTTAGGCGCTCACTGCTCAATCCAGCATTCACCGTCTCAACGCGCTAGCTGGAATAGGGACGACGATGATG

cov pid 8281 3 8400

1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

```
GGCTTCCTGGACGAAATGCTAGATGAAACATCTAGAGACGACNTGGCCCTGGGATGAGCCATCGGAAGAAGCGGAGGAGCGGTGAGTCNGTTAGCCCTAGAGATTGGCAACATC
GGCATGCTGGACGAAATGCTAGATGAAACATCTAGAGACGACNTGGCCCTGGGATGAGCCATCGGAAGAAGCGGAGGAGCGGTGAGTCNGTTAGCCCTAGAGATTGGCAACATC
GGCATGCTGGACGAAATGCTAGATGAAACATCTAGAGACGACNTGGCCCTGGGATGAGCCATCGGAAGAAGCGGAGGAGCGGTGAGTCNGTTAGCCCTAGAGATTGGCAACATC
GGCTTCCTGGACGAAATGCTAGATGAAACATCTAGAGACGACNTGGCCCTGGGATGAGCCATCGGAAGAAGCGGAGGAGCGGTGAGTCNGTTAGCCCTAGAGATTGGCAACATC
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

8401

```
GAGGACCGGATTTGGCGGCACTCCTGCTGCTGCGCCGAGGCTGGATTAAAGTTTTTTCTATGATTTCTCCGGTCTTTTGTTCATGCCCTCTAGAATTTTAACTGTTATTT
GAGGACCGGATTTGGCGGCACTCCTGCTGCTGCGCCGAGGCTGGATTAAAGTTTTTTCTATGATTTCTCCGGTCTTTTGTTCATGCCCTCTAGAATTTTAACTGTTATTT
GAGGACCGGATTTGGCGGCACTCCTGCTGCTGCGCCGAGGCTGGATTAAAGTTTTTTCTATGATTTCTCCGGTCTTTTGTTCATGCCCTCTAGAATTTTAACTGTTATTT
GAGGACCGGATTTGGCGGCACTCCTGCTGCTGCGCCGAGGCTGGATTAAAGTTTTTTCTATGATTTCTCCGGTCTTTTGTTCATGCCCTCTAGAATTTTAACTGTTATTT
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

8521

```
GGATATGCCCTCAAGAGCAATGAAATGATAATATGCTGATAATCAATCTGTGATTTTATGTTGATTTGGACCTTTTGATTTAGCTACCCATCCCTATACATATATATAATA--GAC
GGATATGCCCTCAAGAGCAATGAAATGATAATATGCTGATAATCAATCTGTGATTTTATGTTGATTTGGACCTTTTGATTTAGCTACCCATCCCTATACATATATATAATA--GAC
GGATATGCCCTCAAGAGCAATGAAATGATAATATGCTGATAATCAATCTGTGATTTTATGTTGATTTGGACCTTTTGATTTAGCTACCCATCCCTATACATATATATAATA--GAC
GGATATGCCCTCAAGAGCAATGAAATGATAATATGCTGATAATCAATCTGTGATTTTATGTTGATTTGGACCTTTTGATTTAGCTACCCATCCCTATACATATATATAATA--GAC
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

8641

```
AACCAATGGGACGAAATTTCTGTTGCTCACTCCCTCCGATATTTTCTATTCTGTTTTTATGCAGCATTTGGATAGCTTTACAGATGAGGACAGGAGAGCGGAGCCGAAATGC
AACCAATGGGACGAAATTTCTGTTGCTCACTCCCTCCGATATTTTCTATTCTGTTTTTATGCAGCATTTGGATAGCTTTACAGATGAGGACAGGAGAGCGGAGCCGAAATGC
AACCAATGGGACGAAATTTCTGTTGCTCACTCCCTCCGATATTTTCTATTCTGTTTTTATGCAGCATTTGGATAGCTTTACAGATGAGGACAGGAGAGCGGAGCCGAAATGC
AACCAATGGGACGAAATTTCTGTTGCTCACTCCCTCCGATATTTTCTATTCTGTTTTTATGCAGCATTTGGATAGCTTTACAGATGAGGACAGGAGAGCGGAGCCGAAATGC
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

8761

```
ATAACTGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
ATAACTGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
ATAACTGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
ATAACTGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

8881

```
TTTTATCAATGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
TTTTATCAATGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
TTTTATCAATGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
TTTTATCAATGAAGCCAAAATACCAGTCCCAAGCTCTTAACTAAGAAGGACATTAATAGGACAGGACAGTGGCTACCTGAGAAAATAATAGTAAATATTTTGAATGCATACCCAA
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9001

```
CTTTGTAAGTAAACATCAAACTTCAACTTTCCGGCAACCTTAGTSCACCTTAGCCGGTTAGCCCAATGATGCTGACCTTGAACCTTACAGTTAACETTGTGAGCCCTCCTCCT
CTTTGTAAGTAAACATCAAACTTCAACTTTCCGGCAACCTTAGTSCACCTTAGCCGGTTAGCCCAATGATGCTGACCTTGAACCTTACAGTTAACETTGTGAGCCCTCCTCCT
CTTTGTAAGTAAACATCAAACTTCAACTTTCCGGCAACCTTAGTSCACCTTAGCCGGTTAGCCCAATGATGCTGACCTTGAACCTTACAGTTAACETTGTGAGCCCTCCTCCT
CTTTGTAAGTAAACATCAAACTTCAACTTTCCGGCAACCTTAGTSCACCTTAGCCGGTTAGCCCAATGATGCTGACCTTGAACCTTACAGTTAACETTGTGAGCCCTCCTCCT
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9121

```
CAACACGATAGTAAAAACAGCACATTAATACAGATTATCGAGATTATCGAGATTATGTTTTTTTCTTGCAACACAAACATTTTCTCAATTAATAAAAAAGGCGCATCGGAAG
CAACACGATAGTAAAAACAGCACATTAATACAGATTATCGAGATTATCGAGATTATGTTTTTTTCTTGCAACACAAACATTTTCTCAATTAATAAAAAAGGCGCATCGGAAG
CAACACGATAGTAAAAACAGCACATTAATACAGATTATCGAGATTATCGAGATTATGTTTTTTTCTTGCAACACAAACATTTTCTCAATTAATAAAAAAGGCGCATCGGAAG
CAACACGATAGTAAAAACAGCACATTAATACAGATTATCGAGATTATCGAGATTATGTTTTTTTCTTGCAACACAAACATTTTCTCAATTAATAAAAAAGGCGCATCGGAAG
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9241

```
GATACACAGTAGATTTCTGAGCCGCGACATCAAGGCCTCTGACGATTAATTTCCAAACTTTGCTTCGGATTAAATCTCATTTTAAATCTTCGATTTAATTTCAAAATATTGTT
GATACACAGTAGATTTCTGAGCCGCGACATCAAGGCCTCTGACGATTAATTTCCAAACTTTGCTTCGGATTAAATCTCATTTTAAATCTTCGATTTAATTTCAAAATATTGTT
GATACACAGTAGATTTCTGAGCCGCGACATCAAGGCCTCTGACGATTAATTTCCAAACTTTGCTTCGGATTAAATCTCATTTTAAATCTTCGATTTAATTTCAAAATATTGTT
GATACACAGTAGATTTCTGAGCCGCGACATCAAGGCCTCTGACGATTAATTTCCAAACTTTGCTTCGGATTAAATCTCATTTTAAATCTTCGATTTAATTTCAAAATATTGTT
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9361

```
TTTTATCCGCGATCAGGATTTTTAAATAAAAAGTTTTGATACCCCGTAGCAACCGACCGCCCTAGTAATAAAAAAAGACTAAGATAATTTAGAAAAATTTCTGATCAAAAATTG
ttttatccgcgatcaggttttttaataaaaaagttttgataccocgtagcaaacgcaagcctagtaataaaaaaagacaaagataatttagaaaaatttctgatcaaaaattg
ttttatccgcgatcaggttttttaataaaaaagttttgataccocgtagcaaacgcaagcctagtaataaaaaaagacaaagataatttagaaaaatttctgatcaaaaattg
ttttatccgcgatcaggttttttaataaaaaagttttgataccocgtagcaaacgcaagcctagtaataaaaaaagacaaagataatttagaaaaatttctgatcaaaaattg
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9481

```
CTTCTATTTTTAGTAGGATTTATGAAACTCTAGAGATGCTCTTTTTATTTCCACATACCTTTTCTCAAGTTGGAAAACATGATTTGGAAATAAATCCTAGGAACTTTTGG
CTTCTATTTTTAGTAGGATTTATGAAACTCTAGAGATGCTCTTTTTATTTCCACATACCTTTTCTCAAGTTGGAAAACATGATTTGGAAATAAATCCTAGGAACTTTTGG
CTTCTATTTTTAGTAGGATTTATGAAACTCTAGAGATGCTCTTTTTATTTCCACATACCTTTTCTCAAGTTGGAAAACATGATTTGGAAATAAATCCTAGGAACTTTTGG
CTTCTATTTTTAGTAGGATTTATGAAACTCTAGAGATGCTCTTTTTATTTCCACATACCTTTTCTCAAGTTGGAAAACATGATTTGGAAATAAATCCTAGGAACTTTTGG
```

		cov	pid
1	IS18760_ARG3_node	100.0%	100.0%
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

9601

```
AGATACCTAACCTTAAATGATCTCAAAAACACACCTCAAAAATTTTTTTAGCAGTCCACACACATTTATCTTACATTAATCTGAAATTAATTTCCCACTGGATCTTTGAAAGAGA
AGATACCTAACCTTAAATGATCTCAAAAACACACCTCAAAAATTTTTTTAGCAGTCCACACACATTTATCTTACATTAATCTGAAATTAATTTCCCACTGGATCTTTGAAAGAGA
AGATACCTAACCTTAAATGATCTCAAAAACACACCTCAAAAATTTTTTTAGCAGTCCACACACATTTATCTTACATTAATCTGAAATTAATTTCCCACTGGATCTTTGAAAGAGA
AGATACCTAACCTTAAATGATCTCAAAAACACACCTCAAAAATTTTTTTAGCAGTCCACACACATTTATCTTACATTAATCTGAAATTAATTTCCCACTGGATCTTTGAAAGAGA
```


3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

GAGCACFCACAGGCACFCFCAGGCAGCAGCTGGCAGCAGAGCCGGGAGTGAAGAAGATCAGCCCTCCCGATCGACCTCCAGCCCTCCTCTCCTCGATGCTTCGCCATATCGTG
 GAGCACFCACAGGCACFCFCAGGCAGCAGCTGGGC-----GGGAGTGAAGAAGATCAGCCCTCCCGATCGACCTCCAGCCCTCCTCTCCTCGATGCTTCGCCATATCGTG

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

AGAGCTTTTGTCTTGCCTCAATCAATGGAGGCCTCTGCTAGCTTGGCCCTTCCCTTTCTTGTACATCCCTGCAACTCTTGCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 AGAGCTTTTGTCTTGCCTCAATCAATGGAGGCCTCTGCTAGCTTGGCCCTTCCCTTTCTTGTACATCCCTGCAACTCTTGCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 AGAGCTTTTGTCTTGCCTCAATCAATGGAGGCCTCTGCTAGCTTGGCCCTTCCCTTTCTTGTACATCCCTGCAACTCTTGCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 AGAGCTTTTGTCTTGCCTCAATCAATGGAGGCCTCTGCTAGCTTGGCCCTTCCCTTTCTTGTACATCCCTGCAACTCTTGCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

GCAT--GCA--TTCCGCCACGATCACCTGGAGAAATGGAGAGACTCG-----CGGCAGTGGCACTGGCACTCCGTCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 GCATATGCTTTCCG---GATCACTGGAGAAATGGAGAGACTCGATCGGCCTCGCGGCAGTGGCACTGGCACTCCGTCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 GCATATGCTTTCCG---GATCACTGGAGAAATGGAGAGACTCGATCGGCCTCGCGGCAGTGGCACTGGCACTCCGTCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT
 GCAT--GCA--TTCCGCCACGATCACCTGGAGAAATGGAGAGACTCG-----CGGCAGTGGCACTGGCACTCCGTCCTCCCTCCCTCTCAGCTACCCGACATGCTAGCACCTT

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CGCCGCCGCCCGCTGACCCGGGAAGCGAGACGGGGGCAAGGAGATCAAGGATTCATTTCTTTGCCCCCTCCAGCTTCCAAAGCCGAAAAAGCCCAAAGCCGAAACGGAAGCTAC
 CGCCGCCGCCCGCTGACCCGGGAAGCGAGACGGGGGCAAGGAGATCAAGGATTCATTTCTTTGCCCCCTCCAGCTTCCAAAGCCGAAAAAGCCCAAAGCCGAAACGGAAGCTAC
 CGCCGCCGCCCGCTGACCCGGGAAGCGAGACGGGGGCAAGGAGATCAAGGATTCATTTCTTTGCCCCCTCCAGCTTCCAAAGCCGAAAAAGCCCAAAGCCGAAACGGAAGCTAC
 CGCCGCCGCCCGCTGACCCGGGAAGCGAGACGGGGGCAAGGAGATCAAGGATTCATTTCTTTGCCCCCTCCAGCTTCCAAAGCCGAAAAAGCCCAAAGCCGAAACGGAAGCTAC

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CCCCCTGCAATGCTCTTCCCTTGGTGGTCTGCTGCTGAGCAAAAAGCCAGCTTTATGCTTGTGAACTCGACCCCTCCCGCTCCCGTCCCACTACCCCGCCCGCTCCGCTCGATCGGG
 CCCCCATGCAATGCTCTTCCCTTGGTGGTCTGCTGCTGAGCAAAAAGCCAGCTTTATGCTTGTGAACTCGACCCCTCCCGCTCCCGTCCCACTACCCCGCCCGCTCCGCTCGATCGGG
 CCCCCATGCAATGCTCTTCCCTTGGTGGTCTGCTGCTGAGCAAAAAGCCAGCTTTATGCTTGTGAACTCGACCCCTCCCGCTCCCGTCCCACTACCCCGCCCGCTCCGCTCGATCGGG
 CCCCCATGCAATGCTCTTCCCTTGGTGGTCTGCTGCTGAGCAAAAAGCCAGCTTTATGCTTGTGAACTCGACCCCTCCCGCTCCCGTCCCACTACCCCGCCCGCTCCGCTCGATCGGG

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CTTCTTCTCAGCTCGACCTCCGCTTTGAGCCGAGAGCCCTGCTGAGATTCGATTCAGCAAAATTCGAAAAGCTCAGTATCAGCCGCTCCGCTTGGCTTGGCCGATCGAAGCTT
 CTTCTTCTCAGCTCGACCTCCGCTTTGAGCCGAGAGCCCTGCTGAGATTCGATTCAGCAAAATTCGAAAAGCTCAGTATCAGCCGCTCCGCTTGGCTTGGCCGATCGAAGCTT
 CTTCTTCTCAGCTCGACCTCCGCTTTGAGCCGAGAGCCCTGCTGAGATTCGATTCAGCAAAATTCGAAAAGCTCAGTATCAGCCGCTCCGCTTGGCTTGGCCGATCGAAGCTT
 CTTCTTCTCAGCTCGACCTCCGCTTTGAGCCGAGAGCCCTGCTGAGATTCGATTCAGCAAAATTCGAAAAGCTCAGTATCAGCCGCTCCGCTTGGCTTGGCCGATCGAAGCTT

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

GGCTTGCCTTCTTCTTACCTGCGCCCGGAGGCCTCTTTGGAAGGTGGTGGCCCGCCGGGGGGAGTAAAGGCTAGTGGGATCCGAGAGTGCCTAATGATGAGGCGATTAATACACCCAG
 GGCTTGCCTTCTTCTTACCTGCGCCCGGAGGCCTCTTTGGAAGGTGGTGGCCCGCCGGGGGGAGTAAAGGCTAGTGGGATCCGAGAGTGCCTAATGATGAGGCGATTAATACACCCAG
 GGCTTGCCTTCTTCTTACCTGCGCCCGGAGGCCTCTTTGGAAGGTGGTGGCCCGCCGGGGGGAGTAAAGGCTAGTGGGATCCGAGAGTGCCTAATGATGAGGCGATTAATACACCCAG
 GGCTTGCCTTCTTCTTACCTGCGCCCGGAGGCCTCTTTGGAAGGTGGTGGCCCGCCGGGGGGAGTAAAGGCTAGTGGGATCCGAGAGTGCCTAATGATGAGGCGATTAATACACCCAG

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

AAAACAAACAACTCCACCTGCGCCATCGATGCTTTGCAATCGCATCGCATTTGGCCCGCCGAGCGGGTGGCCGGCTACGACTGCAGCTCCCTCCATCGACCTCGCCCGCGGCAC
 AAAACAAACAACTCCACCTGCGCCATCGATGCTTTGCAATCGCATCGCATTTGGCCCGCCGAGCGGGTGGCCGGCTACGACTGCAGCTCCCTCCATCGACCTCGCCCGCGGCAC
 AAAACAAACAACTCCACCTGCGCCATCGATGCTTTGCAATCGCATCGCATTTGGCCCGCCGAGCGGGTGGCCGGCTACGACTGCAGCTCCCTCCATCGACCTCGCCCGCGGCAC
 AAAACAAACAACTCCACCTGCGCCATCGATGCTTTGCAATCGCATCGCATTTGGCCCGCCGAGCGGGTGGCCGGCTACGACTGCAGCTCCCTCCATCGACCTCGCCCGCGGCAC

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

GGTATTCATTTCCCTTAGGCCCTTAGCCCTCACCCTACAGCCGCAATAATACAGTAACAGATGAGTAGATGACCCCTCTTTCCCTAAATAACTCTACTACTACCCCCACATTTTATTGTTGGGG
 GGTATTCATTTCCCTTAGGCCCTTAGCCCTCACCCTACAGCCGCAATAATACAGTAACAGATGAGTAGATGACCCCTCTTTCCCTAAATAACTCTACTACTACCCCCACATTTTATTGTTGGGG
 GGTATTCATTTCCCTTAGGCCCTTAGCCCTCACCCTACAGCCGCAATAATACAGTAACAGATGAGTAGATGACCCCTCTTTCCCTAAATAACTCTACTACTACCCCCACATTTTATTGTTGGGG
 GGTATTCATTTCCCTTAGGCCCTTAGCCCTCACCCTACAGCCGCAATAATACAGTAACAGATGAGTAGATGACCCCTCTTTCCCTAAATAACTCTACTACTACCCCCACATTTTATTGTTGGGG

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

GTGAAGCTTGCAGGGGTTTCTTGCATTTCTTGGAAAGGCAATGATCGGCTCGGCAATGATTTCTTCCGCTTCAATTTCCGCTGCTCCCTTGGAGTTGGGACATTTTATTGCTT
 GTGAAGCTTGCAGGGGTTTCTTGCATTTCTTGGAAAGGCAATGATCGGCTCGGCAATGATTTCTTCCGCTTCAATTTCCGCTGCTCCCTTGGAGTTGGGACATTTTATTGCTT
 GTGAAGCTTGCAGGGGTTTCTTGCATTTCTTGGAAAGGCAATGATCGGCTCGGCAATGATTTCTTCCGCTTCAATTTCCGCTGCTCCCTTGGAGTTGGGACATTTTATTGCTT
 GTGAAGCTTGCAGGGGTTTCTTGCATTTCTTGGAAAGGCAATGATCGGCTCGGCAATGATTTCTTCCGCTTCAATTTCCGCTGCTCCCTTGGAGTTGGGACATTTTATTGCTT

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CACCTGCCTTATCTCTTGGCCCTCTCTGCTCCTTCTGCTTATGCTGGTGAACCTCTCCAGATAGACACAG-AAAAAAAAA--CCTTGGAGATAATAGAACTCAACCTTCC
 CACCTGCCTTATCTCTTGGCCCTCTCTGCTCCTTCTGCTTATGCTGGTGAACCTCTCCAGATAGACACAG-AAAAAAAAA--CCTTGGAGATAATAGAACTCAACCTTCC
 CACCTGCCTTATCTCTTGGCCCTCTCTGCTCCTTCTGCTTATGCTGGTGAACCTCTCCAGATAGACACAG-AAAAAAAAA--CCTTGGAGATAATAGAACTCAACCTTCC
 CACCTGCCTTATCTCTTGGCCCTCTCTGCTCCTTCTGCTTATGCTGGTGAACCTCTCCAGATAGACACAG-AAAAAAAAA--CCTTGGAGATAATAGAACTCAACCTTCC

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CAAAAAAAAAAAAAA--CGGAATTCGATCTTACCGCAATCAGCCCTTTTCACTGTAATCTGCTAAATCAAGAAAAA--CTAAACCTTAAATACAAATCCCTTGGAGTTTCTTCCCTTGAACCT
 CAAAAAAAAAAAAAA--CGGAATTCGATCTTACCGCAATCAGCCCTTTTCACTGTAATCTGCTAAATCAAGAAAAA--CTAAACCTTAAATACAAATCCCTTGGAGTTTCTTCCCTTGAACCT
 CAAAAAAAAAAAAAA--CGGAATTCGATCTTACCGCAATCAGCCCTTTTCACTGTAATCTGCTAAATCAAGAAAAA--CTAAACCTTAAATACAAATCCCTTGGAGTTTCTTCCCTTGAACCT
 CAAAAAAAAAAAAAA--CGGAATTCGATCTTACCGCAATCAGCCCTTTTCACTGTAATCTGCTAAATCAAGAAAAA--CTAAACCTTAAATACAAATCCCTTGGAGTTTCTTCCCTTGAACCT

1 IS18760_ARG3_node 100.0% 100.0%
 2 BTX623_ARG3_4:55090987..55123019 99.4% 58.8%
 3 BTX642_ARG3_4:49743985..49775977 99.4% 58.8%
 4 RTX430_ARG3_4:50144987..50177189 99.7% 58.4%

CTCTACCTGGCTTTTCCCTCGATTTTCTTGTGAGAAAGAGGAAACCAATGATATTCATGATGATTTGATCTCCCTCTATCGATAGCGATGCCATGATGACGGCTTACTCACC

	cov	pid							
1 IS18760_ARG3_node	100.0%	100.0%	19681	7	:	:	:	:	8 19800
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	19801		:	:	:	9	19920
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	19921		:	:	:	0	20040
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20041		:	:	:	1	20160
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20161		:	:	:	2	20280
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20281		:	:	:	3	20400
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20401		:	:	:	5	20520
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20521		:	:	:	6	20640
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20641		:	:	:	7	20760
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20761		:	:	:	8	20880
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	20881		:	:	:	9	21000
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%							

1 IS18760_ARG3_node	100.0%	100.0%	21001		:	:	:	1	21120
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%							
3 BTX642_ARG3_4:497433985..49775977	99.4%	58.8%							

4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	tcogtaggaccataaggcttctgtttaacaaatggtgcccacctcttaggattttcttcaactcccggttaataagcttaataatctcttggtagagcctggcctgccatggctt	
		cov	pid	21121	2
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	gagcatagtaaggagaagaattcaactttaaaccoccataccgattgccaatcctcogaactccctgatgtaaacatagtagccctgacggttagtaattggttgaggaaatccaaatc	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	gagcatagtaaggagaagaattcaactttaaaccoccataccgattgccaatcctcogaactccctgatgtaaacatagtagccctgacggttagtaattggttgaggaaatccaaatc	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	gagcatagtaaggagaagaattcaactttaaaccoccataccgattgccaatcctcogaactccctgatgtaaacatagtagccctgacggttagtaattggttgaggaaatccaaatc	
		cov	pid	21241	3
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ggtaaatgatagctccttcaacaaatcaatcatattggccgatgtgac-ttcttcaaaaggaaatagcttcaacccatttagtgaataatcgggtggcaactagaaatgaacttatgccct	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ggtaaatgatagctccttcaacaaatcaatcatattggccgatgtgac-ttcttcaaaaggaaatagcttcaacccatttagtgaataatcgggtggcaactagaaatgaacttatgccct	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ggtaaatgatagctccttcaacaaatcaatcatattggccgatgtgac-ttcttcaaaaggaaatagcttcaacccatttagtgaataatcgggtggcaactagaaatgaacttatgccct	
		cov	pid	21361	4
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ttgctagatgggtggaataattggccgatcaaaatcaatagcccatcctcggaaaggccatggcttataataggattcattagccgatgaggtgctcttggaaatggtacaaacttttga	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ttgctagatgggtggaataattggccgatcaaaatcaatagcccatcctcggaaaggccatggcttataataggattcattagccgatgaggtgctcttggaaatggtacaaacttttga	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ttgctagatgggtggaataattggccgatcaaaatcaatagcccatcctcggaaaggccatggcttataataggattcattagccgatgaggtgctcttggaaatggtacaaacttttga	
		cov	pid	21481	5
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	catccttgacaccctttgaaatattaaagcaactctcaagtagcgtggccagtaataccatctcctcaatcattcctctgaaagctgactgtagtggcccacataccct	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	catccttgacaccctttgaaatattaaagcaactctcaagtagcgtggccagtaataccatctcctcaatcattcctctgaaagctgactgtagtggcccacataccct	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	catccttgacaccctttgaaatattaaagcaactctcaagtagcgtggccagtaataccatctcctcaatcattcctctgaaagctgactgtagtggcccacataccct	
		cov	pid	21601	7
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	tcattgatttctccatcaaaactcttagcttcaatcaccoccaagcactcgaagaagaattccatcaatagttcggtagtacaattcactctcggaggagcacaactctgggtggcctgaaac	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	tcattgatttctccatcaaaactcttagcttcaatcaccoccaagcactcgaagaagaattccatcaatagttcggtagtacaattcactctcggaggagcacaactctgggtggcctgaaac	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	tcattgatttctccatcaaaactcttagcttcaatcaccoccaagcactcgaagaagaattccatcaatagttcggtagtacaattcactctcggaggagcacaactctgggtggcctgaaac	
		cov	pid	21721	8
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	cggaactcgccttcaactctctagacggatcttcaaaataacacagattcttcttctcacaatcctggcaccatggcagatctgcatcaatcattaggtgatataccggagcagtc	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	cggaactcgccttcaactctctagacggatcttcaaaataacacagattcttcttctcacaatcctggcaccatggcagatctgcatcaatcattaggtgatataccggagcagtc	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	cggaactcgccttcaactctctagacggatcttcaaaataacacagattcttcttctcacaatcctggcaccatggcagatctgcatcaatcattaggtgatataccggagcagtc	
		cov	pid	21841	9
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	tgagccaaacagattggcctcttcaattatgcaatcgaggaacatactctaatcggaaatccttgaattccttcaataattgcaactcgcctctgtaataattatgagaactcactctgg	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	tgagccaaacagattggcctcttcaattatgcaatcgaggaacatactctaatcggaaatccttgaattccttcaataattgcaactcgcctctgtaataattatgagaactcactctgg	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	tgagccaaacagattggcctcttcaattatgcaatcgaggaacatactctaatcggaaatccttgaattccttcaataattgcaactcgcctctgtaataattatgagaactcactctgg	
		cov	pid	21961	0
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	caatcaataactccagccaattgatttaaaaccagcatagaaatcccggaagacttcgacagcatcagcatggacactctcacaacttcaacccctttatataagcttgatattcagcc	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	caatcaataactccagccaattgatttaaaaccagcatagaaatcccggaagacttcgacagcatcagcatggacactctcacaacttcaacccctttatataagcttgatattcagcc	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	caatcaataactccagccaattgatttaaaaccagcatagaaatcccggaagacttcgacagcatcagcatggacactctcacaacttcaacccctttatataagcttgatattcagcc	
		cov	pid	22081	1
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	taattggttggtagtggtgcaacaatcggcaaggaaaactcactctctcccgaggggaaatagtagtactatcagcatcctgcccocgggtcactgtagatccatcaaaagaaaagt	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	taattggttggtagtggtgcaacaatcggcaaggaaaactcactctctcccgaggggaaatagtagtactatcagcatcctgcccocgggtcactgtagatccatcaaaagaaaagt	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	taattggttggtagtggtgcaacaatcggcaaggaaaactcactctctcccgaggggaaatagtagtactatcagcatcctgcccocgggtcactgtagatccatcaaaagaaaagt	
		cov	pid	22201	3
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	gtccaaggcaacaatttccaaactccacogtaccacaatgttgtagttacaagatcggccaataatctgcctttaaattgacctagccgatccaataacgcagatcgaactccgacagcgcca	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	gtccaaggcaacaatttccaaactccacogtaccacaatgttgtagttacaagatcggccaataatctgcctttaaattgacctagccgatccaataacgcagatcgaactccgacagcgcca	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	gtccaaggcaacaatttccaaactccacogtaccacaatgttgtagttacaagatcggccaataatctgcctttaaattgacctagccgatccaataacgcagatcgaactccgacagcgcca	
		cov	pid	22321	4
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	aaatccatttaacctactcctgcccctcaataatcggcatggacagcatgtaccggaccacatcactcttgcataaacagtgcatcggccgataaacagtaagcttaactgatacaag	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	aaatccatttaacctactcctgcccctcaataatcggcatggacagcatgtaccggaccacatcactcttgcataaacagtgcatcggccgataaacagtaagcttaactgatacaag	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	aaatccatttaacctactcctgcccctcaataatcggcatggacagcatgtaccggaccacatcactcttgcataaacagtgcatcggccgataaacagtaagcttaactgatacaag	
		cov	pid	22441	5
1	IS18760_ARG3_node	100.0%	100.0%	-----	
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	agaaataaagcataggtattctcaatagccgaatcactagttcagcatcaatacaccctctgcttaagtaataaacacagttctctccctcaaatctctgaaataaagccg	

3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	agaaaataagcataggcatagtttctcaatagcggaaacacctagttcagcagcaaatcaacctctgtcttaagtaataaacacagctttctccctcaaatcttgaataaagccg	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	agaaaataagcataggcatagtttctcaatagcggaaacacctagttcagcagcaaatcaacctctgtcttaagtaataaacacagctttctccctcaaatcttgaataaagccg	
		cov	pid	22561	6
1	IS18760_ARG3_node	100.0%	100.0%	-----	22680
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	aaccgatgaccatctcttcggtagacaaatacaatcggaagggctttccttctgaggtggaatataaacctggaggattcaccataactttttgatttcacccagagccaactgctgtt	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	aaccgatgaccatctcttcggtagacaaatacaatcggaagggctttccttctgaggtggaatataaacctggaggattcaccataactttttgatttcacccagagccaactgctgtt	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	aaccgatgaccatctcttcggtagacaaatacaatcggaagggctttccttctgaggtggaatataaacctggaggattcaccataactttttgatttcacccagagccaactgctgtt	
		cov	pid	22681	7
1	IS18760_ARG3_node	100.0%	100.0%	-----	8 22800
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ccttcccccaataaattcttgatcggtctttaaacttaaaaagggctgaaagcagcaatttaccagataaattagatagaaatgaaactctgataaaaattaccttgccgatcaaggact	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ccttcccccaataaattcttgatcggtctttaaacttaaaaagggctgaaagcagcaatttaccagataaattagatagaaatgaaactctgataaaaattaccttgccgatcaaggact	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ccttcccccaataaattcttgatcggtctttaaacttaaaaagggctgaaagcagcaatttaccagataaattagatagaaatgaaactctgataaaaattaccttgccgatcaaggact	
		cov	pid	22801	9
1	IS18760_ARG3_node	100.0%	100.0%	-----	22920
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ggagctcagctcttgggtatgggccaactatcttattgatggcgcaatggatcgtcgactaatttcaatccccctgtgggtgaccagaacccaagaattgtctcgcgatacaccacaa	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ggagctcagctcttgggtatgggccaactatcttattgatggcgcaatggatcgtcgactaatttcaatccccctgtgggtgaccagaacccaagaattgtctcgcgatacaccacaa	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ggagctcagctcttgggtatgggccaactatcttattgatggcgcaatggatcgtcgactaatttcaatccccctgtgggtgaccagaacccaagaattgtctcgcgatacaccacaa	
		cov	pid	22921	0
1	IS18760_ARG3_node	100.0%	100.0%	-----	23040
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	atgcaacttattggggttcaatttcaaacatgcttctctgtacactccaacacttttccgcaatcggcaagaatgctttgtgaaatctccagacttaaccaccacatacaataataaa	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	atgcaacttattggggttcaatttcaaacatgcttctctgtacactccaacacttttccgcaatcggcaagaatgctttgtgaaatctccagacttaaccaccacatacaataataaa	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	atgcaacttattggggttcaatttcaaacatgcttctctgtacactccaacacttttccgcaatcggcaagaatgctttgtgaaatctccagacttaaccaccacatacaataataaa	
		cov	pid	23041	1
1	IS18760_ARG3_node	100.0%	100.0%	-----	23160
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	tttcaactatcttggcgataaaatctatgaaataataaaatcaatggccctttgataagtagcaccagcatctttaaagcacaaggtcaatgactatccattcaaaccaatccaactgaccag	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	tttcaactatcttggcgataaaatctatgaaataataaaatcaatggccctttgataagtagcaccagcatctttaaagcacaaggtcaatgactatccattcaaaccaatccaactgaccag	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	tttcaactatcttggcgataaaatctatgaaataataaaatcaatggccctttgataagtagcaccagcatctttaaagcacaaggtcaatgactatccattcaaaccaatccaactgaccag	
		cov	pid	23161	2
1	IS18760_ARG3_node	100.0%	100.0%	-----	23280
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	ggcactgaaagcagctcttgggaatctctctcagccatgaaatattgattgtaccctgcaattgccaatcaataaagctaaataacccagatgcccagccgagcgtcgactagtagatcgg	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	ggcactgaaagcagctcttgggaatctctctcagccatgaaatattgattgtaccctgcaattgccaatcaataaagctaaataacccagatgcccagccgagcgtcgactagtagatcgg	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	ggcactgaaagcagctcttgggaatctctctcagccatgaaatattgattgtaccctgcaattgccaatcaataaagctaaataacccagatgcccagccgagcgtcgactagtagatcgg	
		cov	pid	23281	3
1	IS18760_ARG3_node	100.0%	100.0%	-----	23400
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	caagtggcattgggtatccatccaatcggtgtagctttattgagattcctgaaatcaatgcaagcccaagcttcccgttctcttctgtagaccggaagaacattagaaatccactcggcat	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	caagtggcattgggtatccatccaatcggtgtagctttattgagattcctgaaatcaatgcaagcccaagcttcccgttctcttctgtagaccggaagaacattagaaatccactcggcat	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	caagtggcattgggtatccatccaatcggtgtagctttattgagattcctgaaatcaatgcaagcccaagcttcccgttctcttctgtagaccggaagaacattagaaatccactcggcat	
		cov	pid	23401	5
1	IS18760_ARG3_node	100.0%	100.0%	-----	23520
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	agcgacactgcccgaataaatttggcttcaataaagtttgggtatttcaagccttgaatgtaggaagaataataggaattacatcgccgagctggctgctgattgtggccgaaatccagacttga	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	agcgacactgcccgaataaatttggcttcaataaagtttgggtatttcaagccttgaatgtaggaagaataataggaattacatcgccgagctggctgctgattgtggccgaaatccagacttga	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	agcgacactgcccgaataaatttggcttcaataaagtttgggtatttcaagccttgaatgtaggaagaataataggaattacatcgccgagctggctgctgattgtggccgaaatccagacttga	
		cov	pid	23521	6
1	IS18760_ARG3_node	100.0%	100.0%	-----	23640
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	taggcaaccgatgttcaacaaatgtagctgggtccaaaccaggcaatcagatataatcccaagcaagcaatcttataatctctttaaacaatcagtttaactgttgcctacactcaggatcta	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	taggcaaccgatgttcaacaaatgtagctgggtccaaaccaggcaatcagatataatcccaagcaagcaatcttataatctctttaaacaatcagtttaactgttgcctacactcaggatcta	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	taggcaaccgatgttcaacaaatgtagctgggtccaaaccaggcaatcagatataatcccaagcaagcaatcttataatctctttaaacaatcagtttaactgttgcctacactcaggatcta	
		cov	pid	23641	7
1	IS18760_ARG3_node	100.0%	100.0%	-----	23760
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	acttagcaactaaataaagtggtctaggcttatacaccactacctaatactactctactagatcaatcgccgagctgtgaaatccctagcctaactttccatcaatcggcgaacataatccatta	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	acttagcaactaaataaagtggtctaggcttatacaccactacctaatactactctactagatcaatcgccgagctgtgaaatccctagcctaactttccatcaatcggcgaacataatccatta	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	acttagcaactaaataaagtggtctaggcttatacaccactacctaatactactctactagatcaatcgccgagctgtgaaatccctagcctaactttccatcaatcggcgaacataatccatta	
		cov	pid	23761	8
1	IS18760_ARG3_node	100.0%	100.0%	-----	23880
2	BTX623_ARG3_4:55090987..55123019	99.4%	58.8%	aaaacctctgctcgaactgactgcttggatcgggtggaatttctgtaatcggcaaccttgagaagctctttcccaaatctctcctgaaatcacactagctcctttcataagttgctgctc	
3	BTX642_ARG3_4:49743985..49775977	99.4%	58.8%	aaaacctctgctcgaactgactgcttggatcgggtggaatttctgtaatcggcaaccttgagaagctctttcccaaatctctcctgaaatcacactagctcctttcataagttgctgctc	
4	RTX430_ARG3_4:50144987..50177189	99.7%	58.4%	aaaacctctgctcgaactgactgcttggatcgggtggaatttctgtaatcggcaaccttgagaagctctttcccaaatctctcctgaaatcacactagctcctttcataagttgctgctc	
		cov	pid	23881	9
1	IS18760_ARG3_node	100.0%	100.0%	-----	0 24000

	cov	pid
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%
1 IS18760_ARG3_node	100.0%	100.0%
2 BTX623_ARG3_4:55090987..55123019	99.4%	58.8%
3 BTX642_ARG3_4:49743985..49775977	99.4%	58.8%
4 RTX430_ARG3_4:50144987..50177189	99.7%	58.4%

3 BTX642_ARG3_4:49743985..49775977	4 RTX430_ARG3_4:50144987..50177189
CTGCTGCACACCTCATCATGAGCTCCCTCCCTCCACGGCTGCCCTGCCTAACCAAGCAGG	CTGCTGCACACCTCATCATGAGCTCCCTCCCTCCACGGCTGCCCTGCCTAACCAAGCAGG
ACACGGACACGGGCACGGACACGGACATTCGGTTCCACACAGACTCCGGCG	acacgggcaeggacacggacaTTCGGTTCCACACAGACTCCGGCG

1 IS18760_ARG3_node	2 BTX623_ARG3_4:55090987..55123019	3 BTX642_ARG3_4:49743985..49775977	4 RTX430_ARG3_4:50144987..50177189
CCGGCG	CCGGCG	CCGGCG	CCGGCG
ACGGATGACACGACCA	ACGGATGACACGACCA	ACGGATGACACGACCA	ACGGATGACACGACCA
CGCAGGGCCC	CGCAGGGCCC	CGCAGGGCCC	CGCAGGGCCC
CCCTGCCTCC	CCCTGCCTCC	CCCTGCCTCC	CCCTGCCTCC
CCCACCCCGACTC	CCCACCCCGACTC	CCCACCCCGACTC	CCCACCCCGACTC
TAGCAGGAGGACGAGG	TAGCAGGAGGACGAGG	TAGCAGGAGGACGAGG	TAGCAGGAGGACGAGG