

Assembly Report

Experiment Details

ExperimentID:	8
Species:	Treponema Pallidum
Sequencing Coverage:	13
Number of Partitions:	18
Allowed Mismatch Count in (Base):	0
Length of Sliding Window:	17

Reads Dataset Details

Total Reads Count:	52032
Total Dataset Size in (Base):	15646281
Valid Read Count:	51981
Rejected Read Count:	51
Maximum Read Length:	301
Minimum Read Length:	301

Reference Genome Details

Length of Reference Genome (Base):	1139633
Number of K-mers:	1138140

Length of K-mer	458
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Assembly Details

Number of Contigs:	2111
Contig N50:	1451
Contig N90:	1251
Number of Scaffold	5
Scaffold N50:	332444
Scaffold N90:	162351
Mis-assembly Count:	2
TotalAssembly Size:	1139639

Repeat Details

Total Reads Count(Non-Repeat) :	22099
Total Reads Count(Repeat):	666
Retetitive Read Count based on (Partitions Identifier):	666
Retetitive Read Count (Entire Read Frequency Identifier):	0
Retetitive Read Count (Contained Read Frequency Identifier):	0
Total Repetitive Sequences Count	5119

Total Unique Repetitive Sequences Count			665			
Total Repeat Size (Base)			58890			
Starting	Ending	Repetitive Sequences	Repeat Count	Length	Positions	
1	332444	AAAAGGTATG GATGACT	2	17	Start Position	End Position
					233906	233922
					282351	282367
1	332444	AAACGGGGTT TAGAATAATGA TGGAGAGTT	2	30	Start Position	End Position
					231238	231267
					279673	279702
1	332444	AAAGATTGGTA GTTTTG	2	17	Start Position	End Position
					234606	234622
					283051	283067
1	332444	AAAGGAAGGA GAGGAAACCG ATGTCCACAT	2	30	Start Position	End Position
					136138	136167
					153540	153569
1	332444	AAAGTAGGTCT TAGTGA	2	17	Start Position	End Position
					235523	235539
					283968	283984

1	332444	AAATAGTCAGACTATTGGTAGT	2	22	Start Position	End Position
					136516	136537
					153918	153939
1	332444	AAATCGGTGCGCAGTG	2	17	Start Position	End Position
					235456	235472
					283901	283917
1	332444	AACCAACAAGATGTTAC	2	17	Start Position	End Position
					233673	233689
					282118	282134
1	332444	AACCCCTACTGCCAGTTGCC	2	20	Start Position	End Position
					232368	232387
					280803	280822
1	332444	AACCCGACAGGGTAAAG	2	17	Start Position	End Position
					233223	233239
					281668	281684
1	332444	AACCGATGTCACATCTACTCGCTGTTTC	2	30	Start Position	End Position
					136153	136182
					153555	153584

1	332444	AACCGCAAAA GGCAATCGTA GTCCGGATT	2	30	Start Positio n	End Positio n
					232538	232567
					280973	281002
1	332444	AACCTCGGGA GAAGTGT	2	17	Start Positio n	End Positio n
					234856	234872
					283301	283317
1	332444	AACGCAATGC CCCACTGGAG CTGGGCTGTG	2	30	Start Positio n	End Positio n
					136587	136616
					153989	154018
1	332444	AAGACTCCTTG CACACT	2	17	Start Positio n	End Positio n
					235956	235972
					284401	284417
1	332444	AAGATGAAAAG AACCCC	2	17	Start Positio n	End Positio n
					233623	233639
					282068	282084
1	332444	AAGATTACATA TCCCTG	2	17	Start Positio n	End Positio n
					235923	235939
					284368	284384

1	332444	AAGCAGCACA TACCATGCCC GCAAGTACCC	2	30	Start Positio n	End Positio n
					136654	136683
					154056	154085
1	332444	AAGCCGGCGC CTGGTTCGAG GGTGAGTCGG	2	30	Start Positio n	End Positio n
					135906	135935
					153308	153337
1	332444	AAGCGGAAGC CGGCGCCTGG TTCGA	2	25	Start Positio n	End Positio n
					135900	135924
					153302	153326
1	332444	AAGCGTTGCAT CGGCCCGAA GCCATACTT	2	30	Start Positio n	End Positio n
					136070	136099
					153472	153501
1	332444	AAGGCGGGTT TCTGGCCGAT GATTGACGCT	2	30	Start Positio n	End Positio n
					231988	232017
					280423	280452
1	332444	AAGGGAAGCA GGTGTAG	2	17	Start Positio n	End Positio n
					234706	234722
					283151	283167

1	332444	AAGGGATAGG AGTCCTG	2	17	Start Positio n	End Positio n
					233756	233772
					282201	282217
1	332444	AAGGGGGAGG GAAGGGTGTG GGGCGGACAG	2	30	Start Positio n	End Positio n
					231188	231217
					279623	279652
1	332444	AAGGGGTATA GGTTATGGGT	2	20	Start Positio n	End Positio n
					231101	231120
					279536	279555
1	332444	AAGGTATTAAG CCGACC	2	17	Start Positio n	End Positio n
					236006	236022
					284451	284467
1	332444	AAGGTGGGGA TGACGTCAAGT CATCATGGC	2	30	Start Positio n	End Positio n
					232438	232467
					280873	280902
1	332444	AATAATGATGG AGAGTTTGA	2	20	Start Positio n	End Positio n
					231251	231270
					279686	279705

1	332444	AATCAAAGCAG CAAGTCCTA	2	20	Start Positio n	End Positio n
					135701	135720
					153103	153122
1	332444	AATCCCCGAG CTCAACTTGG	2	20	Start Positio n	End Positio n
					231868	231887
					280303	280322
1	332444	AATCGCCCCC GGAATAGACG GC	2	22	Start Positio n	End Positio n
					155418	155439
					156551	156572
1	332444	AATGGACGGG CATGTAC	2	17	Start Positio n	End Positio n
					148718	148734
					150573	150589
1	332444	AATTCCAAGTG TAGGGGTGG	2	20	Start Positio n	End Positio n
					231935	231954
					280370	280389
1	332444	AATTGGAGGA GCCTAAA	2	17	Start Positio n	End Positio n
					233356	233372
					281801	281817

1	332444	ACAAGGTCGA TAGGCTG	2	17	Start Positio n	End Positio n
					235973	235989
					284418	284434
1	332444	ACAAGTACCGT GAGGGA	2	17	Start Positio n	End Positio n
					233606	233622
					282051	282067
1	332444	ACATCAAGAG GAGCGCCGTA	2	20	Start Positio n	End Positio n
					232251	232270
					280686	280705
1	332444	ACATCGACGG GAAAGTT	2	17	Start Positio n	End Positio n
					235623	235639
					284068	284084
1	332444	ACCAACGGCA GGGAAATAGT CAGACTATTG	2	30	Start Positio n	End Positio n
					136503	136532
					153905	153934
1	332444	ACCCGTCTAAA CACTTCCCT	2	20	Start Positio n	End Positio n
					135801	135820
					153203	153222

1	332444	ACCGATGTCC ACATCTACTCC GCTGTTTCC	2	30	Start Positio n	End Positio n
					136154	136183
					153556	153585
1	332444	ACCGCCTGGG GAGTATGCTC	2	20	Start Positio n	End Positio n
					232135	232154
					280570	280589
1	332444	ACCGTAGCTTA CTATTG	2	17	Start Positio n	End Positio n
					235223	235239
					283668	283684
1	332444	ACCTTACCCG GGTTTGACAT	2	20	Start Positio n	End Positio n
					232235	232254
					280670	280689
1	332444	ACGACTCTGG ACACTGT	2	17	Start Positio n	End Positio n
					235123	235139
					283568	283584
1	332444	ACGCAATGCC CCACTGGAGC TGGGCTGTGC	2	30	Start Positio n	End Positio n
					136588	136617
					153990	154019

1	332444	ACGCCGGCGT TCAGGCCGGT	2	20	Start Positio n	End Positio n
					135318	135337
					152720	152739
1	332444	ACGCCTGCAT AACCAGAAGC AGCACATACC	2	30	Start Positio n	End Positio n
					136638	136667
					154040	154069
1	332444	ACGGATAAAA GGTACTC	2	17	Start Positio n	End Positio n
					235573	235589
					284018	284034
1	332444	ACGGCAGTCT CTCCCCTTCC	2	20	Start Positio n	End Positio n
					232885	232904
					281320	281339
1	332444	ACGGCCCAGA CTCCTACGGG AGGCAGCAGC	2	30	Start Positio n	End Positio n
					231588	231617
					280023	280052
1	332444	ACGTGCTACAA TGGTTGCTACA GAGCGATG	2	30	Start Positio n	End Positio n
					232488	232517
					280923	280952

1	332444	ACTACGATACT GCTCGG	2	17	Start Positio n	End Positio n
					154539	154555
					155768	155784
1	332444	ACTAGGTGTTG GGGCATGAG	2	20	Start Positio n	End Positio n
					232085	232104
					280520	280539
1	332444	ACTCCGCTGTT TCCCACATTGT GGGCCTGG	2	30	Start Positio n	End Positio n
					136170	136199
					153572	153601
1	332444	ACTGGAGCTG GGCTGTGCCA C	2	21	Start Positio n	End Positio n
					136600	136620
					154002	154022
1	332444	ACTGGTACCC ACTGTCAGGTA G	2	22	Start Positio n	End Positio n
					136316	136337
					153718	153739
1	332444	AGACAAGGGT GCCGAAGTG	2	19	Start Positio n	End Positio n
					134935	134953
					152337	152355

1	332444	AGACACCCTG AAATACAT	2	18	Start Positio n	End Positio n
					148518	148535
					149722	149739
1	332444	AGACCCCGTG AACCTTC	2	17	Start Positio n	End Positio n
					235206	235222
					283651	283667
1	332444	AGACCCGAAG CCAGGGT	2	17	Start Positio n	End Positio n
					233823	233839
					282268	282284
1	332444	AGACGTATAG GTGGTGA	2	17	Start Positio n	End Positio n
					234956	234972
					283401	283417
1	332444	AGATAGCTGG TTCTCCC	2	17	Start Positio n	End Positio n
					233956	233972
					282401	282417
1	332444	AGATGAGCCT GCGACCCATT	2	20	Start Positio n	End Positio n
					231485	231504
					279920	279939

1	332444	AGCAAGTGGT GTTGGGGACT CTGGCGGAAC	2	30	Start Positio n	End Positio n
					232388	232417
					280823	280852
1	332444	AGCACGCCCT GTTCCCACTG GGCGCTGAGC	2	30	Start Positio n	End Positio n
					135003	135032
					152405	152434
1	332444	AGCAGCCATT CCTTGAA	2	17	Start Positio n	End Positio n
					234223	234239
					282668	282684
1	332444	AGCAGGTGGG TGTAGGGGTC ACCGCTTTTG	2	30	Start Positio n	End Positio n
					135339	135368
					152741	152770
1	332444	AGCATGTGCG TTRACTCTGGT	2	20	Start Positio n	End Positio n
					135851	135870
					153253	153272
1	332444	AGCCGTACCG GAAGGTGCGG	2	20	Start Positio n	End Positio n
					232768	232787
					281203	281222

1	332444	AGCCTTGTGG AGGACCG	2	17	Start Positio n	End Positio n
					233873	233889
					282318	282334
1	332444	AGCGGTAGGT TTGGTAAAGGA CAGGGCCGT	2	30	Start Positio n	End Positio n
					136370	136399
					153772	153801
1	332444	AGCGTGCCTTT TGTAGA	2	17	Start Positio n	End Positio n
					233706	233722
					282151	282167
1	332444	AGCGTTGCAT CGGCCCCGAA GCCATACTTG	2	30	Start Positio n	End Positio n
					136071	136100
					153473	153502
1	332444	AGCTGGGCAA AGTTAACCACA CAGGAAGGA	2	30	Start Positio n	End Positio n
					136287	136316
					153689	153718
1	332444	AGGAAAGCGT TGCATCGGCC CC	2	22	Start Positio n	End Positio n
					136066	136087
					153468	153489

1	332444	AGGAAGCGGT AGGTTTGGTAA A	2	22	Start Positio n	End Positio n
					136366	136387
					153768	153789
1	332444	AGGAAGGTGG GGATGACGTC	2	20	Start Positio n	End Positio n
					232435	232454
					280870	280889
1	332444	AGGACAGGGC CGTTGAGCTTT TAGAAGACG	2	30	Start Positio n	End Positio n
					136387	136416
					153789	153818
1	332444	AGGAGCGCGT CTATGTTGAG	2	20	Start Positio n	End Positio n
					135501	135520
					152903	152922
1	332444	AGGGCGAAGG AGAAGCGGAA GCCGGCGCCT	2	30	Start Positio n	End Positio n
					135888	135917
					153290	153319
1	332444	AGGGTTGCCT GGAAGGAAGC GGTAGGTTTG	2	30	Start Positio n	End Positio n
					136353	136382
					153755	153784

1	332444	AGGTAGCGAA ATTCCTT	2	17	Start Positio n	End Positio n
					235073	235089
					283518	283534
1	332444	AGGTGTTGGG GCATGAGTCT CGGCGCCGAC	2	30	Start Positio n	End Positio n
					232088	232117
					280523	280552
1	332444	AGGTGTTGGG TTAAGTCCCGC AACGAGCGC	2	30	Start Positio n	End Positio n
					232338	232367
					280773	280802
1	332444	AGTACGGCGG GACACGA	2	17	Start Positio n	End Positio n
					233523	233539
					281968	281984
1	332444	AGTACTAATAA GTCGTG	2	17	Start Positio n	End Positio n
					236023	236039
					284468	284484
1	332444	AGTATTAGGGT GGGGTG	2	17	Start Positio n	End Positio n
					233056	233072
					281501	281517

1	332444	AGTCAGACTAT TGGTAGTGCG AAACCCATG	2	30	Start Positio n	End Positio n
					136520	136549
					153922	153951
1	332444	AGTCCCGCAA CGAGCGCAAC	2	20	Start Positio n	End Positio n
					232351	232370
					280786	280805
1	332444	AGTGGCGGAC TGGTGAGTAA	2	20	Start Positio n	End Positio n
					231351	231370
					279786	279805
1	332444	AGTGGGAAGC CCGCCTC	2	17	Start Positio n	End Positio n
					235906	235922
					284351	284367
1	332444	ATACCCGAAGT CACTAGCCT	2	20	Start Positio n	End Positio n
					232685	232704
					281120	281139
1	332444	ATACTGCTCCT TCGCGG	2	17	Start Positio n	End Positio n
					236173	236189
					284618	284634

1	332444	ATAGCGAGTG TCCTTTTCTGA ATAGGCACG	2	30	Start Positio n	End Positio n
					136238	136267
					153640	153669
1	332444	ATATCCGGGA GGAGTTC	2	17	Start Positio n	End Positio n
					234373	234389
					282818	282834
1	332444	ATATTGGGAAG GTTCTGCAC	2	20	Start Positio n	End Positio n
					135768	135787
					153170	153189
1	332444	ATCAAAAACAT AGCCAT	2	17	Start Positio n	End Positio n
					234923	234939
					283368	283384
1	332444	ATCAAGAGAG ATTCCGA	2	17	Start Positio n	End Positio n
					233323	233339
					281768	281784
1	332444	ATCACTCGCTT GACAAA	2	17	Start Positio n	End Positio n
					236223	236239
					284668	284684

1	332444	ATCCCAGGCA CCATTGGAAA GGAAGGAGAG	2	30	Start Positio n	End Positio n
					136121	136150
					153523	153552
1	332444	ATCCGGCAAA ATCAAAGTA	2	19	Start Positio n	End Positio n
					135385	135403
					152787	152805
1	332444	ATCTACTCCGC TGTTTCCCACA	2	22	Start Positio n	End Positio n
					136166	136187
					153568	153589
1	332444	ATCTTCACGAA ACGCAC	2	17	Start Positio n	End Positio n
					184422	184438
					312004	312020
1	332444	ATGAAGTTGGA ATCGCTAGTAA TCGCACAT	2	30	Start Positio n	End Positio n
					232588	232617
					281023	281052
1	332444	ATGACGGTAG TCGTGCGAATA AGCCCCGGC	2	30	Start Positio n	End Positio n
					231738	231767
					280173	280202

1	332444	ATGAGCCTGC GAGTTAC	2	17	Start Positio n	End Positio n
					233723	233739
					282168	282184
1	332444	ATGCCAGAAG AGAGCCACTT	2	20	Start Positio n	End Positio n
					135468	135487
					152870	152889
1	332444	ATGGGCATGG CATGGTGCCG	2	20	Start Positio n	End Positio n
					232818	232837
					281253	281272
1	332444	ATGTAGGTGA GGGGGATGTA CACGC	2	25	Start Positio n	End Positio n
					135285	135309
					152687	152711
1	332444	ATGTGCGTTAC TCTGGTGTTG GTTACCGGC	2	30	Start Positio n	End Positio n
					135854	135883
					153256	153285
1	332444	ATGTTCGGAA GGGATAA	2	17	Start Positio n	End Positio n
					235873	235889
					284318	284334

1	332444	ATTCAGTTCGT ACCCTCCGT	2	20	Start Positio n	End Positio n
					135251	135270
					152653	152672
1	332444	ATTCTGCCTTC CACTTCGTAG	2	21	Start Positio n	End Positio n
					148985	149005
					151851	151871
1	332444	ATTGGAAAGG AAGGAGAGGA AA	2	22	Start Positio n	End Positio n
					136133	136154
					153535	153556
1	332444	ATTGTGGGCC TGGTAGCCGA GTTTTGCCCC	2	30	Start Positio n	End Positio n
					136187	136216
					153589	153618
1	332444	ATTTTCCCCAA GAGTTC	2	17	Start Positio n	End Positio n
					235606	235622
					284051	284067
1	332444	ATTTTCGTTTC TCTAGAGTG	2	20	Start Positio n	End Positio n
					231335	231354
					279770	279789

1	332444	CAACTCTTGGA TCGGAAGAG	2	20	Start Positio n	End Positio n
					135568	135587
					152970	152989
1	332444	CAAGCACGCC CTGTTCCCAC	2	20	Start Positio n	End Positio n
					135001	135020
					152403	152422
1	332444	CAATCGTAGTC CGGATTGAA	2	20	Start Positio n	End Positio n
					232551	232570
					280986	281005
1	332444	CAATTAAAGCG GTACGT	2	17	Start Positio n	End Positio n
					235706	235722
					284151	284167
1	332444	CACACAGGAA GGACTGGTAC CCACTGTCAG	2	30	Start Positio n	End Positio n
					136304	136333
					153706	153735
1	332444	CACACGTGCT ACAATGGTTG	2	20	Start Positio n	End Positio n
					232485	232504
					280920	280939

1	332444	CACAGTAAAC GATGTACACT	2	20	Start Positio n	End Positio n
					232068	232087
					280503	280522
1	332444	CACCATCCGA GTTGGAGATA	2	20	Start Positio n	End Positio n
					232668	232687
					281103	281122
1	332444	CACCGCCACG TAGAGGTC	2	18	Start Positio n	End Positio n
					154422	154439
					155651	155668
1	332444	CACCTGCCCCG GTGCTGG	2	17	Start Positio n	End Positio n
					234973	234989
					283418	283434
1	332444	CACCTTCTCGA AGGGACTG	3	19	Start Positio n	End Positio n
					135035	135053
					152437	152455
					332422	332440
1	332444	CACGAGTTTCC CCTCCACC	2	19	Start Positio n	End Positio n
					135785	135803
					153187	153205

1	332444	CACGCCTTCC CCAAAATTGG	2	20	Start Positio n	End Positio n
					135201	135220
					152603	152622
1	332444	CACGGAGGGG AAACCGGAAT	2	20	Start Positio n	End Positio n
					231918	231937
					280353	280372
1	332444	CACTGGTCGA GTACGCA	2	17	Start Positio n	End Positio n
					234256	234272
					282701	282717
1	332444	CAGCATGGTG CGGTGAATGT	2	20	Start Positio n	End Positio n
					232618	232637
					281053	281072
1	332444	CAGGAGGTTG GCTTAGA	2	17	Start Positio n	End Positio n
					234206	234222
					282651	282667
1	332444	CAGGAGTGCT GTTTTGTTTC	2	21	Start Positio n	End Positio n
					135950	135970
					153352	153372

1	332444	CAGGCTCCCC TTTGCCC	2	17	Start Position	End Position
					236206	236222
					284651	284667
1	332444	CAGGGCTCGG GCTTGGG	2	17	Start Position	End Position
					148689	148705
					149369	149385
1	332444	CAGGGGGCAC AGCTCCATT	2	19	Start Position	End Position
					135235	135253
					152637	152655
1	332444	CAGGTCGAGC AGATACG	2	17	Start Position	End Position
					235506	235522
					283951	283967
1	332444	CAGGTGGGTG TAGGGGTCAC CGCTTTTGGT	2	30	Start Position	End Position
					135341	135370
					152743	152772
1	332444	CATACCCGTTC CCATCC	2	17	Start Position	End Position
					236123	236139
					284568	284584

1	332444	CATAGCGAGT GTCCTTTTCTG AATAGGCAC	2	30	Start Positio n	End Positio n
					136237	136266
					153639	153668
1	332444	CATGCAGGCG GACTGGTAAG CCTGGTGTGA	2	30	Start Positio n	End Positio n
					231838	231867
					280273	280302
1	332444	CATGTACTGAT GAAGGA	2	17	Start Positio n	End Positio n
					234356	234372
					282801	282817
1	332444	CATGTGCGTTA CTCTGGTGTTG GTTACCGG	2	30	Start Positio n	End Positio n
					135853	135882
					153255	153284
1	332444	CATTAGCTTGT TGGTGGGGT	2	20	Start Positio n	End Positio n
					231501	231520
					279936	279955
1	332444	CCAAAGATATT AGTGCCTG	2	19	Start Positio n	End Positio n
					135435	135453
					152837	152855

1	332444	CCAACGGCAG GGAAATAGTCA GACTATTGG	2	30	Start Positio n	End Positio n
					136504	136533
					153906	153935
1	332444	CCAACGTAAG CAGCCGCTGA CG	2	22	Start Positio n	End Positio n
					136033	136054
					153435	153456
1	332444	CCACACAGGA AGGACTGGTA CCCCTGTCA	2	30	Start Positio n	End Positio n
					136303	136332
					153705	153734
1	332444	CCACACCCCT GAGCGTGCCT CCCCTCGGCG	2	30	Start Positio n	End Positio n
					136454	136483
					153856	153885
1	332444	CCACAGCTGG GCAAAGTTAAC C	2	22	Start Positio n	End Positio n
					136283	136304
					153685	153706
1	332444	CCACATTGTG GGCCTGGTAG CC	2	22	Start Positio n	End Positio n
					136183	136204
					153585	153606

1	332444	CCAGAAGCAG CACATACCATG	2	21	Start Positio n	End Positio n
					136650	136670
					154052	154072
1	332444	CCAGTGCGTG GATTCTTCTGG A	2	22	Start Positio n	End Positio n
					136566	136587
					153968	153989
1	332444	CCATGCCCCG AAGTACCCCC GC	2	22	Start Positio n	End Positio n
					136666	136687
					154068	154089
1	332444	CCATGTAAGG AGCGTCAGCA A	3	21	Start Positio n	End Positio n
					134983	135003
					152385	152405
					332370	332390
1	332444	CCCAATCAAAC TCTGAA	2	17	Start Positio n	End Positio n
					234056	234072
					282501	282517
1	332444	CCCACACCCC TGAGCGTGCC TCCCCTCGGC	2	30	Start Positio n	End Positio n
					136453	136482
					153855	153884

1	332444	CCCACTCACTC CCCCTCCTCTC ACTTCTAC	2	30	Start Positio n	End Positio n
					136704	136733
					154106	154135
1	332444	CCCACTGGGC GCTGAGCTCC AC	3	22	Start Positio n	End Positio n
					135016	135037
					152418	152439
					332403	332424
1	332444	CCCGAAGTCA CTAGCCTAACC CGCAAGGGA	2	30	Start Positio n	End Positio n
					232688	232717
					281123	281152
1	332444	CCCGCAAGTA CCCCCGCTTG CATCACCTGC	2	30	Start Positio n	End Positio n
					136671	136700
					154073	154102
1	332444	CCCGCACGAA TGGTGTA	2	17	Start Positio n	End Positio n
					235106	235122
					283551	283567
1	332444	CCCGCTTGCA TCACCTGCCT GC	2	22	Start Positio n	End Positio n
					136683	136704
					154085	154106

1	332444	CCCTAAGGCG AGGACGA	2	17	Start Positio n	End Positio n
					234506	234522
					282951	282967
1	332444	CCCTACCCCTT TGC GTA	2	17	Start Positio n	End Positio n
					236073	236089
					284518	284534
1	332444	CCCTCCTCTCA CTTCTACCTCA	2	22	Start Positio n	End Positio n
					136716	136737
					154118	154139
1	332444	CCCTTGGTAC GTCAGGT	2	17	Start Positio n	End Positio n
					235323	235339
					283768	283784
1	332444	CCCTTTGTTTT GTTTAT	2	17	Start Positio n	End Positio n
					233006	233022
					281451	281467
1	332444	CCGAAGCTAC GGGTCTT	2	17	Start Positio n	End Positio n
					234306	234322
					282751	282767

1	332444	CCGACGAAGA ATGAGGACGG	2	20	Start Positio n	End Positio n
					231701	231720
					280136	280155
1	332444	CCGAGTTTTGC CCCGGAGCCG GAGAAACCA	2	30	Start Positio n	End Positio n
					136203	136232
					153605	153634
1	332444	CCGCACAAGC GGTGGAGCAT GTGGTTTAAT	2	30	Start Positio n	End Positio n
					232188	232217
					280623	280652
1	332444	CCGCGGTAAC ACGTAAGGGG	2	20	Start Positio n	End Positio n
					231785	231804
					280220	280239
1	332444	CCGGAGAAAC CAGGGGCATA GCGAGTGTCC	2	30	Start Positio n	End Positio n
					136221	136250
					153623	153652
1	332444	CCGGCGTTCA GGCCGGTGAG CAGGTGGGTG	2	30	Start Positio n	End Positio n
					135321	135350
					152723	152752

1	332444	CCGGTGAGCA GGTGGGTGTA GGGGTCA	2	27	Start Positio n	End Positio n
					135333	135359
					152735	152761
1	332444	CCGTGGTAGG TGGGCGG	2	17	Start Positio n	End Positio n
					235373	235389
					283818	283834
1	332444	CCGTGTTCGC CGTGTGGCGG	2	20	Start Positio n	End Positio n
					232835	232854
					281270	281289
1	332444	CCTCCCCTCG GCGGGTGTGG GTGTGCTTTG	2	30	Start Positio n	End Positio n
					136471	136500
					153873	153902
1	332444	CCTGCCCACT CACTCCCCCT C	2	21	Start Positio n	End Positio n
					136700	136720
					154102	154122
1	332444	CCTGTGTCTAA CAGGGG	2	17	Start Positio n	End Positio n
					233373	233389
					281818	281834

1	332444	CCTTATGTCCG GGGCTACAC	2	20	Start Positio n	End Positio n
					232468	232487
					280903	280922
1	332444	CCTTCGATGC GGGCGGACGT	2	20	Start Positio n	End Positio n
					151103	151122
					152218	152237
1	332444	CCTTGACCAG GCCATAAATCG	2	21	Start Positio n	End Positio n
					155402	155422
					156535	156555
1	332444	CCTTGCTTTGA GGATAGCTC	2	20	Start Positio n	End Positio n
					135818	135837
					153220	153239
1	332444	CGAAAGCCTG ACGGAGCGAC ACCGCGTGGA	2	30	Start Positio n	End Positio n
					231638	231667
					280073	280102
1	332444	CGAAATGCCTT TAGGGA	2	17	Start Positio n	End Positio n
					233973	233989
					282418	282434

1	332444	CGAACCTCTG GTGTACC	2	17	Start Positio n	End Positio n
					235823	235839
					284268	284284
1	332444	CGAAGCCATA CTTGCTGTGC GTGGTGTGTCAG	2	30	Start Positio n	End Positio n
					136087	136116
					153489	153518
1	332444	CGAAGGAGAA GCGGAAGCCG GCGCCTGGTT	2	30	Start Positio n	End Positio n
					135892	135921
					153294	153323
1	332444	CGAATAGTGG TTTACGG	2	17	Start Positio n	End Positio n
					233106	233122
					281551	281567
1	332444	CGAGCGTTCC TTCTGCAAT	2	19	Start Positio n	End Positio n
					135685	135703
					153087	153105
1	332444	CGAGCTTAAG GAATCCGGCA AAATCAAAGT	2	30	Start Positio n	End Positio n
					135373	135402
					152775	152804

1	332444	CGAGGTTGTG AAGTGGAGCA	2	20	Start Positio n	End Positio n
					232518	232537
					280953	280972
1	332444	CGAGTTTTGCC CCGGAGCCGG AGAAACCAG	2	30	Start Positio n	End Positio n
					136204	136233
					153606	153635
1	332444	CGATACGCCT CTTGACAGGT GCTGCATGGC	2	30	Start Positio n	End Positio n
					232288	232317
					280723	280752
1	332444	CGCAGATATTG A	2	12	Start Positio n	End Positio n
					143990	144001
					209790	209801
1	332444	CGCGCTCAAG GAAAGCGAG	2	19	Start Positio n	End Positio n
					135535	135553
					152937	152955
1	332444	CGCTAGTAATC GCACATCAG	2	20	Start Positio n	End Positio n
					232601	232620
					281036	281055

1	332444	CGCTGGCGGT GCGTTTTAAGC ATGCAAGTC	2	30	Start Positio n	End Positio n
					231288	231317
					279723	279752
1	332444	CGGAACCTCTT GCAATT	2	17	Start Positio n	End Positio n
					234556	234572
					283001	283017
1	332444	CGGAAGCCGG CGCCTGGTTC GAGGGTGAGT	2	30	Start Positio n	End Positio n
					135903	135932
					153305	153334
1	332444	CGGAGCCGGA GAAACCAGGG GC	2	22	Start Positio n	End Positio n
					136216	136237
					153618	153639
1	332444	CGGCCTCCTA CTCCCCACAG GA	2	22	Start Positio n	End Positio n
					135933	135954
					153335	153356
1	332444	CGGCTGGATC ACCTCCTTTC	2	20	Start Positio n	End Positio n
					232785	232804
					281220	281239

1	332444	CGGGAGGGAA TGCCCGTTTG	2	20	Start Positio n	End Positio n
					231718	231737
					280153	280172
1	332444	CGGGTGACAA AGGGTTTCCA CA	2	22	Start Positio n	End Positio n
					136266	136287
					153668	153689
1	332444	CGGTAACACG TAAGGGGCGA GCGTTGTTCG	2	30	Start Positio n	End Positio n
					231788	231817
					280223	280252
1	332444	CGGTACCCTTA ACGTAGTT	2	19	Start Positio n	End Positio n
					135985	136003
					153387	153405
1	332444	CGGTCGACGC CATAGGAAAG CGTTGCATCG	2	30	Start Positio n	End Positio n
					136053	136082
					153455	153484
1	332444	CGTAAGCAGC CGCTGACGGT CGACGCCATA	2	30	Start Positio n	End Positio n
					136037	136066
					153439	153468

1	332444	CGTCAAGTCAT CATGGCCCT	2	20	Start Positio n	End Positio n
					232451	232470
					280886	280905
1	332444	CGTCCCACAC CGGGAAGT	2	18	Start Positio n	End Positio n
					151120	151137
					152235	152252
1	332444	CGTCGAGGGC GAAGGAGAAG CGGAAG	2	26	Start Positio n	End Positio n
					135883	135908
					153285	153310
1	332444	CGTGTGCAGG GT	2	12	Start Positio n	End Positio n
					92290	92301
					254025	254036
1	332444	CGTTATTTCTG TAACGGATG	2	20	Start Positio n	End Positio n
					135268	135287
					152670	152689
1	332444	CGTTGGATATG TGAGAG	2	17	Start Positio n	End Positio n
					235773	235789
					284218	284234

1	332444	CTAAAGAATTT TATGCGGGT	2	20	Start Positio n	End Positio n
					231068	231087
					279503	279522
1	332444	CTACCATCTCT ATGAGAGTG	2	20	Start Positio n	End Positio n
					135718	135737
					153120	153139
1	332444	CTACGGGAGG CAGCAGCTAA	2	20	Start Positio n	End Positio n
					231601	231620
					280036	280055
1	332444	CTCCGCTGTTT CCCACATTGTG GGCCTGGT	2	30	Start Positio n	End Positio n
					136171	136200
					153573	153602
1	332444	CTCCTACTCCC CACAGGAGTG CTGTTTTGT	2	30	Start Positio n	End Positio n
					135937	135966
					153339	153368
1	332444	CTCGCGTCAA GGAACTC	2	17	Start Positio n	End Positio n
					234823	234839
					283268	283284

1	332444	CTCTACTGCCA GGTCCTTCAG CTGCAGCTG	2	30	Start Positio n	End Positio n
					136421	136450
					153823	153852
1	332444	CTCTCGGCAAT GCCCATGTAA GGAGCGTCA	2	30	Start Positio n	End Positio n
					134970	134999
					152372	152401
1	332444	CTCTCTCTTGG GTCTGAGC	2	19	Start Positio n	End Positio n
					135835	135853
					153237	153255
1	332444	CTCTTTTGGAC GTAGGTCTT	2	20	Start Positio n	End Positio n
					231435	231454
					279870	279889
1	332444	CTGAACGTCA GTCCACCTG	2	20	Start Positio n	End Positio n
					135051	135070
					152453	152472
1	332444	CTGAATGAATA GGGAGG	2	17	Start Positio n	End Positio n
					233256	233272
					281701	281717

1	332444	CTGACCTGCG GAGTGAGTAC GCCTGCATAA	2	30	Start Positio n	End Positio n
					136620	136649
					154022	154051
1	332444	CTGCGGTGGC AAAGTATATGC C	2	22	Start Positio n	End Positio n
					135451	135472
					152853	152874
1	332444	CTGGAACGCA ATGCCCCACT GG	2	22	Start Positio n	End Positio n
					136583	136604
					153985	154006
1	332444	CTGGATCACCT CCTTTCTAAGA GAAAGGGT	2	30	Start Positio n	End Positio n
					232788	232817
					281223	281252
1	332444	CTGGCTCGTG CCGGGAGG	2	18	Start Positio n	End Positio n
					158422	158439
					158518	158535
1	332444	CTGGGTCGAC CACGATC	2	17	Start Positio n	End Positio n
					233556	233572
					282001	282017

1	332444	CTGGTACTGG AGCGCTCGTT	2	20	Start Positio n	End Positio n
					135068	135087
					152470	152489
1	332444	CTGGTCCAGT GTGGCATTCC CTGCCAGCTC	2	30	Start Positio n	End Positio n
					136004	136033
					153406	153435
1	332444	CTGGTCTTTCG CAGTCT	2	17	Start Positio n	End Positio n
					154439	154455
					155668	155684
1	332444	CTGGTGTTGG TTACCGGCGT CGAGGG	2	26	Start Positio n	End Positio n
					135866	135891
					153268	153293
1	332444	CTTCCACTGCA TACGCAGG	2	19	Start Positio n	End Positio n
					135485	135503
					152887	152905
1	332444	CTTGCA TCACC TGCCTGCCCA CTCACTCCC	2	30	Start Positio n	End Positio n
					136687	136716
					154089	154118

1	332444	CTTTTAGAAGA CGCAAGCTCT ACTGCCAGG	2	30	Start Positio n	End Positio n
					136404	136433
					153806	153835
1	332444	CTTTTCTGAAT AGGCACGGGT	2	21	Start Positio n	End Positio n
					136250	136270
					153652	153672
1	332444	GAAAACCTAAG GTTTCC	2	17	Start Positio n	End Positio n
					234456	234472
					282901	282917
1	332444	GAAAGCCTGA CAGAGAG	2	17	Start Positio n	End Positio n
					233456	233472
					281901	281917
1	332444	GAAAGGAAGG AGAGGAAACC GATGTCCACA	2	30	Start Positio n	End Positio n
					136137	136166
					153539	153568
1	332444	GAAATAATCCG GCCTAT	2	17	Start Positio n	End Positio n
					233423	233439
					281868	281884

1	332444	GAACGCTGGC GGTGCGTTTT	2	20	Start Positio n	End Positio n
					231285	231304
					279720	279739
1	332444	GAACGGCAAG GAAGCGAATT	2	20	Start Positio n	End Positio n
					231318	231337
					279753	279772
1	332444	GAACTGCACT GGGTACTGCT GGTCTAGAAT	2	30	Start Positio n	End Positio n
					231888	231917
					280323	280352
1	332444	GAACTGCGGT TGCGGGGG	2	18	Start Positio n	End Positio n
					158455	158472
					158551	158568
1	332444	GAAGCAGCAC ATACCATGCCC GCAAGTACC	2	30	Start Positio n	End Positio n
					136653	136682
					154055	154084
1	332444	GAAGCCATACT TGCTGTGCGT GGTGTCAGT	2	30	Start Positio n	End Positio n
					136088	136117
					153490	153519

1	332444	GAAGCCGGCG CCTGGTTCGA GGGTGAGTCG	2	30	Start Positio n	End Positio n
					135905	135934
					153307	153336
1	332444	GAAGTCTGAAA CTCGACTTC	2	20	Start Positio n	End Positio n
					232568	232587
					281003	281022
1	332444	GAATTATTGGG CGTAAAGGG	2	20	Start Positio n	End Positio n
					231818	231837
					280253	280272
1	332444	GACAAAGGGT TTCCACAGCTG GGCAAAGTT	2	30	Start Positio n	End Positio n
					136271	136300
					153673	153702
1	332444	GACACCAACG GCAGGGAAAT A	2	21	Start Positio n	End Positio n
					136500	136520
					153902	153922
1	332444	GACAGAGAAG CTTGGCC	2	17	Start Positio n	End Positio n
					235273	235289
					283718	283734

1	332444	GACAGGTGCT GCATGGCTGT	2	20	Start Positio n	End Positio n
					232301	232320
					280736	280755
1	332444	GACCAGGCCA TAAATCGCCCC CGGAATAGA	2	30	Start Positio n	End Positio n
					155406	155435
					156539	156568
1	332444	GACCCTTGCC TTTGGTG	2	17	Start Positio n	End Positio n
					234873	234889
					283318	283334
1	332444	GACCTGAGAG GGTGACCGGA	2	20	Start Positio n	End Positio n
					231551	231570
					279986	280005
1	332444	GAGAAGTTTAG CAGTGACAA	2	20	Start Positio n	End Positio n
					135551	135570
					152953	152972
1	332444	GAGAATGCAG GTATAAG	2	17	Start Positio n	End Positio n
					234406	234422
					282851	282867

1	332444	GAGAGGACCG AAGTGGA	2	17	Start Positio n	End Positio n
					235806	235822
					284251	284267
1	332444	GAGCCGGAGG GAAACCG	2	17	Start Positio n	End Positio n
					233773	233789
					282218	282234
1	332444	GAGCGACACC GCGTGGATGA	2	20	Start Positio n	End Positio n
					231651	231670
					280086	280105
1	332444	GAGCGCGTTC ATAGGTGCGC	2	20	Start Positio n	End Positio n
					135518	135537
					152920	152939
1	332444	GAGCGGAAGA CATCACGTA	2	19	Start Positio n	End Positio n
					135585	135603
					152987	153005
1	332444	GAGCTGGGCT GTGCCACTGA CCTGCGGAGT	2	30	Start Positio n	End Positio n
					136604	136633
					154006	154035

1	332444	GAGCTGGGTT CAGAACG	2	17	Start Positio n	End Positio n
					235723	235739
					284168	284184
1	332444	GAGGGCGAAG GAGAAGCGGA AGCCGGCGCC	2	30	Start Positio n	End Positio n
					135887	135916
					153289	153318
1	332444	GAGGGGGGG GTGGCTCCT	2	18	Start Positio n	End Positio n
					158472	158489
					158568	158585
1	332444	GAGGTGCGAA GGTGTGGGGA	2	20	Start Positio n	End Positio n
					232018	232037
					280453	280472
1	332444	GAGTGTGAAAT GAAGTG	2	17	Start Positio n	End Positio n
					234173	234189
					282618	282634
1	332444	GATACCCTGG TAGTCCACAC	2	20	Start Positio n	End Positio n
					232051	232070
					280486	280505

1	332444	GATACGGCCC AGACTCCTAC	2	20	Start Positio n	End Positio n
					231585	231604
					280020	280039
1	332444	GATATTTGAGA GGGTGAGGG	2	20	Start Positio n	End Positio n
					231168	231187
					279603	279622
1	332444	GATGCGATAG CTGCACCAC	2	19	Start Positio n	End Positio n
					135185	135203
					152587	152605
1	332444	GCAAACCGAC ACAGGTA	2	17	Start Positio n	End Positio n
					234773	234789
					283218	283234
1	332444	GCAAACCGCA AAAAGGCAAT	2	20	Start Positio n	End Positio n
					232535	232554
					280970	280989
1	332444	GCAAATCCGT CGTTCGA	2	17	Start Positio n	End Positio n
					234656	234672
					283101	283117

1	332444	GCAAGCTCTA CTGCCAGGTC CT	2	22	Start Positio n	End Positio n
					136416	136437
					153818	153839
1	332444	GCACGCCCTG TTCCCACTGG GCGCTGAGCT	2	30	Start Positio n	End Positio n
					135004	135033
					152406	152435
1	332444	GCACGCGTTTT TACCATGT	2	19	Start Positio n	End Positio n
					134902	134920
					152304	152322
1	332444	GCACGGGGAA TAATGGG	2	17	Start Positio n	End Positio n
					158439	158455
					158535	158551
1	332444	GCAGTCTCTC CCCTTCCCTTT TGAAAAGGG	2	30	Start Positio n	End Positio n
					232888	232917
					281323	281352
1	332444	GCATTTTTGGT GCAAGG	2	17	Start Positio n	End Positio n
					234323	234339
					282768	282784

1	332444	GCCACTGACC TGCGGAGTGA GT	2	22	Start Positio n	End Positio n
					136616	136637
					154018	154039
1	332444	GCCAGCAAGT GGTGTTGGGG	2	20	Start Positio n	End Positio n
					232385	232404
					280820	280839
1	332444	GCCCCACTCAC TCCCCCTCCTC TCACTTCTA	2	30	Start Positio n	End Positio n
					136703	136732
					154105	154134
1	332444	GCCCAGCGGC CGATCGTA	2	18	Start Positio n	End Positio n
					154522	154539
					155751	155768
1	332444	GCCCCATAAC AGTGCAGGGT TGCCTGGAAG	2	30	Start Positio n	End Positio n
					136338	136367
					153740	153769
1	332444	GCCCCGAAGC CATACTTGCTG T	2	22	Start Positio n	End Positio n
					136083	136104
					153485	153506

1	332444	GCCCGCAAGT ACCCCCGCTT GCATCACCTG	2	30	Start Positio n	End Positio n
					136670	136699
					154072	154101
1	332444	GCCCGCGGGG TTAATAATGT	2	20	Start Positio n	End Positio n
					135101	135120
					152503	152522
1	332444	GCCGGAGAAA CCAGGGGCAT AGCGAGTGTC	2	30	Start Positio n	End Positio n
					136220	136249
					153622	153651
1	332444	GCCGGCGCCT GGTTCGAGGG TGAGTCGGCC	2	30	Start Positio n	End Positio n
					135908	135937
					153310	153339
1	332444	GCCGGCGTTC AGGCCGGTGA GCAGGTGGGT	2	30	Start Positio n	End Positio n
					135320	135349
					152722	152751
1	332444	GCCTAACCCG CAAGGGAGGG	2	20	Start Positio n	End Positio n
					232701	232720
					281136	281155

1	332444	GCCTCCCCTC GGCGGGTGTG GGTGTGCTTT	2	30	Start Positio n	End Positio n
					136470	136499
					153872	153901
1	332444	GCCTCCTAAAA GGTAAC	2	17	Start Positio n	End Positio n
					235406	235422
					283851	283867
1	332444	GCCTCGGGGA GGAGCAC	2	17	Start Positio n	End Positio n
					233173	233189
					281618	281634
1	332444	GCCTGGGGAG TATGCTCGCAA GAGTGAAAC	2	30	Start Positio n	End Positio n
					232138	232167
					280573	280602
1	332444	GCCTTTGAGAT GGGGATAGC	2	20	Start Positio n	End Positio n
					231385	231404
					279820	279839
1	332444	GCGAAACCCA TGGGTGTGCT TGCCCGGGCC	2	30	Start Positio n	End Positio n
					136538	136567
					153940	153969

1	332444	GCGAACAGGA TTAGATACCCT GGTAGTCCA	2	30	Start Positio n	End Positio n
					232038	232067
					280473	280502
1	332444	GCGAACGCAT TAAGTGTACC	2	20	Start Positio n	End Positio n
					232118	232137
					280553	280572
1	332444	GCGAAGGAGA AGCGGAAGCC GGCGCCTGGT	2	30	Start Positio n	End Positio n
					135891	135920
					153293	153322
1	332444	GCGAAGGCGG GTTTCTGGCC	2	20	Start Positio n	End Positio n
					231985	232004
					280420	280439
1	332444	GCGCCAGCGG CTAGCACGGT	2	20	Start Positio n	End Positio n
					135651	135670
					153053	153072
1	332444	GCGGAAGCCA CACGGTAGGT	2	20	Start Positio n	End Positio n
					232851	232870
					281286	281305

1	332444	GCGGTAGGTT TGGTAAAGGA CAGGGCCGTT	2	30	Start Positio n	End Positio n
					136371	136400
					153773	153802
1	332444	GCGTCGATGG GTATCCGACC	2	20	Start Positio n	End Positio n
					231535	231554
					279970	279989
1	332444	GCGTGCCTCC CCTCGGCGGG TG	2	22	Start Positio n	End Positio n
					136466	136487
					153868	153889
1	332444	GCGTGGATTC TTCTGGAACG CAATGCCCCA	2	30	Start Positio n	End Positio n
					136571	136600
					153973	154002
1	332444	GCGTGGGAAC CGAGGGGGAT	2	20	Start Positio n	End Positio n
					135168	135187
					152570	152589
1	332444	GCTCATCGCAT CCTGGG	2	17	Start Positio n	End Positio n
					235656	235672
					284101	284117

1	332444	GCTCGCAAGA GTGAAACTCA	2	20	Start Positio n	End Positio n
					232151	232170
					280586	280605
1	332444	GCTCTACTGC CAGGTCCTTCA GCTGCAGCT	2	30	Start Positio n	End Positio n
					136420	136449
					153822	153851
1	332444	GCTCTCCTAC GCCGATG	2	17	Start Positio n	End Positio n
					236156	236172
					284601	284617
1	332444	GCTGAAGCAG GTCCCAA	2	17	Start Positio n	End Positio n
					235673	235689
					284118	284134
1	332444	GCTGAGTATGT G	2	12	Start Positio n	End Positio n
					94040	94051
					299640	299651
1	332444	GCTGCGGCCT CGCTCAGAGA	2	20	Start Positio n	End Positio n
					231468	231487
					279903	279922

1	332444	GCTGGGCAAA GTTAACCACAC AGGAAGGAC	2	30	Start Positio n	End Positio n
					136288	136317
					153690	153719
1	332444	GCTGTGCGTG GTGTCAGTACT	2	21	Start Positio n	End Positio n
					136100	136120
					153502	153522
1	332444	GCTTGCGTTC GGTGGGT	2	17	Start Positio n	End Positio n
					233406	233422
					281851	281867
1	332444	GCTTTGAATTG AAGCCC	2	17	Start Positio n	End Positio n
					235023	235039
					283468	283484
1	332444	GCTTTTAGAAG ACGCAAGCTC TACTGCCAG	2	30	Start Positio n	End Positio n
					136403	136432
					153805	153834
1	332444	GGAAACCGAT GTCCACATCTA	2	21	Start Positio n	End Positio n
					136150	136170
					153552	153572

1	332444	GGAAGCCGGC GCCTGGTTCG AGGGTGAGTC	2	30	Start Positio n	End Positio n
					135904	135933
					153306	153335
1	332444	GGAAGCGCCG TCACTTA	2	17	Start Positio n	End Positio n
					235556	235572
					284001	284017
1	332444	GGACACACTG GGA CTGAGAT	2	20	Start Positio n	End Positio n
					231568	231587
					280003	280022
1	332444	GGACAGGGCC GTTGAGCTTTT AGAAGACGC	2	30	Start Positio n	End Positio n
					136388	136417
					153790	153819
1	332444	GGAGCATGTG GTTTAATTCG	2	20	Start Positio n	End Positio n
					232201	232220
					280636	280655
1	332444	GGAGCGAACA GGATTAGATA	2	20	Start Positio n	End Positio n
					232035	232054
					280470	280489

1	332444	GGAGCGCTTC GA	2	12	Start Positio n	End Positio n
					183448	183459
					219590	219601
1	332444	GGAGCTGGGC TGTGCCACTG ACCTGCGGAG	2	30	Start Positio n	End Positio n
					136603	136632
					154005	154034
1	332444	GGAGGTGCGC GAAGGTC	2	17	Start Positio n	End Positio n
					235423	235439
					283868	283884
1	332444	GGATGACCGA ATGGGGT	2	17	Start Positio n	End Positio n
					233206	233222
					281651	281667
1	332444	GGCATTCCCT GCCAGCTCCA AC	2	22	Start Positio n	End Positio n
					136016	136037
					153418	153439
1	332444	GGCCCCATAA CAGTGCAGGG TTGCCTGGAA	2	30	Start Positio n	End Positio n
					136337	136366
					153739	153768

1	332444	GGCCCGCACAGCGGTGGAG	2	20	Start Position	End Position
					232185	232204
					280620	280639
1	332444	GGCCGATGATTGACGCTGAG	2	20	Start Position	End Position
					232001	232020
					280436	280455
1	332444	GGCGAAGGAG AAGCGGAAGC CGGCGCCTGG	2	30	Start Position	End Position
					135890	135919
					153292	153321
1	332444	GGGAAGGGGG AGGGAAGGGT	2	20	Start Position	End Position
					231185	231204
					279620	279639
1	332444	GGGCATGCAG GCGGACTGGT	2	20	Start Position	End Position
					231835	231854
					280270	280289
1	332444	GGGCGAAAGC CTGACGGAGC	2	20	Start Position	End Position
					231635	231654
					280070	280089

1	332444	GGGCGAAGGA GAAGCGGAAG CCGGCGCCTG	2	30	Start Positio n	End Positio n
					135889	135918
					153291	153320
1	332444	GGGCGGTGCC GAAGGTATGT	2	20	Start Positio n	End Positio n
					232718	232737
					281153	281172
1	332444	GGGCGTGGAA CGAGGTT	2	17	Start Positio n	End Positio n
					150751	150767
					151256	151272
1	332444	GGGGACTCTG GCGGAACTGC	2	20	Start Positio n	End Positio n
					232401	232420
					280836	280855
1	332444	GGGGCATAGC GAGTGTCTTT T	2	22	Start Positio n	End Positio n
					136233	136254
					153635	153656
1	332444	GGGGCGAGCG TTGTTCGGAA	2	20	Start Positio n	End Positio n
					231801	231820
					280236	280255

1	332444	GGGGTAAGGA GTAGGTG	2	17	Start Positio n	End Positio n
					233023	233039
					281468	281484
1	332444	GGGTAATACC GAATACGCTC	2	20	Start Positio n	End Positio n
					231418	231437
					279853	279872
1	332444	GGGTACAAAG GCGAGTTCTA	2	20	Start Positio n	End Positio n
					231051	231070
					279486	279505
1	332444	GGGTCGTAGT CGATGGG	2	17	Start Positio n	End Positio n
					234523	234539
					282968	282984
1	332444	GGGTGTGGGG CGGACAGGTT	2	20	Start Positio n	End Positio n
					231201	231220
					279636	279655
1	332444	GGGTGTGGGT GTGCTTTGACA C	2	22	Start Positio n	End Positio n
					136483	136504
					153885	153906

1	332444	GGGTTGCCTG GAAGGAAGCG GTAGGTTTGG	2	30	Start Positio n	End Positio n
					136354	136383
					153756	153785
1	332444	GGTAAGGTGC GAGTGCG	2	17	Start Positio n	End Positio n
					234673	234689
					283118	283134
1	332444	GGTAATGGCC TACCAAGGCG	2	20	Start Positio n	End Positio n
					231518	231537
					279953	279972
1	332444	GGTAGAGTGG TTGAGTTGTG	2	20	Start Positio n	End Positio n
					231118	231137
					279553	279572
1	332444	GGTAGGCCCC ATAACAGTGCA G	2	22	Start Positio n	End Positio n
					136333	136354
					153735	153756
1	332444	GGTCCAGGCG ACTGTTT	2	17	Start Positio n	End Positio n
					234906	234922
					283351	283367

1	332444	GGTCGACGCC ATAGGAAAGC GTTGCATCGG	2	30	Start Positio n	End Positio n
					136054	136083
					153456	153485
1	332444	GGTGAAATCC CCGTATG	2	17	Start Positio n	End Positio n
					233473	233489
					281918	281934
1	332444	GGTGAGTTGT ACGTCGT	2	17	Start Positio n	End Positio n
					233806	233822
					282251	282267
1	332444	GGTGGGGGTT GACAAGGGGT ATAGGTTATG	2	30	Start Positio n	End Positio n
					231088	231117
					279523	279552
1	332444	GGTGGTGGGG GTTGACAAGG	2	20	Start Positio n	End Positio n
					231085	231104
					279520	279539
1	332444	GGTGTGCTTG CCCGGGCCAG T	2	21	Start Positio n	End Positio n
					136550	136570
					153952	153972

1	332444	GGTTACCGGC GTCGAGGGCG AAGGAGAAGC	2	30	Start Positio n	End Positio n
					135874	135903
					153276	153305
1	332444	GGTTGAAACA GGGGTGA	2	17	Start Positio n	End Positio n
					233856	233872
					282301	282317
1	332444	GGTTTCGAGC TTAAGGAATCC G	2	22	Start Positio n	End Positio n
					135368	135389
					152770	152791
1	332444	GGTTTGAATG GCGCTGCCGA	2	20	Start Positio n	End Positio n
					135668	135687
					153070	153089
1	332444	GGTTTTTCTGC TCCTGCACG	2	20	Start Positio n	End Positio n
					232868	232887
					281303	281322
1	332444	GTAAAGAAGC CGGTTAC	2	17	Start Positio n	End Positio n
					235173	235189
					283618	283634

1	332444	GTAAAGGACA GGGCCGTTGA GC	2	22	Start Positio n	End Positio n
					136383	136404
					153785	153806
1	332444	GTAAATACCGC TCACTG	2	17	Start Positio n	End Positio n
					154506	154522
					155735	155751
1	332444	GTAAC TTGGG AAAAGAA	2	17	Start Positio n	End Positio n
					233306	233322
					281751	281767
1	332444	GTAAGCAGCC GCTGACGGTC GACGCCATAG	2	30	Start Positio n	End Positio n
					136038	136067
					153440	153469
1	332444	GTAAGGCGAA ACTGGGT	2	17	Start Positio n	End Positio n
					233273	233289
					281718	281734
1	332444	GTACACACCG CCCGTCACAC	2	20	Start Positio n	End Positio n
					232651	232670
					281086	281105

1	332444	GTACCCACTGT CAGGTAGGCC CCATAACAG	2	30	Start Positio n	End Positio n
					136320	136349
					153722	153751
1	332444	GTACGTGCTG GGTAGCT	2	17	Start Positio n	End Positio n
					235856	235872
					284301	284317
1	332444	GTACTATCCCA GGCACCATTG G	2	22	Start Positio n	End Positio n
					136116	136137
					153518	153539
1	332444	GTACTCCTTGC TCTATGTTC	2	20	Start Positio n	End Positio n
					135601	135620
					153003	153022
1	332444	GTAGAAATGC GGTGGCGTAG	2	20	Start Positio n	End Positio n
					232268	232287
					280703	280722
1	332444	GTAGTGCGAA ACCCATGGGT GT	2	22	Start Positio n	End Positio n
					136533	136554
					153935	153956

1	332444	GTAGTGCGCA CGAGTGGTAG	2	20	Start Positio n	End Positio n
					135401	135420
					152803	152822
1	332444	GTCAGACTATT GGTAGTGCGA AACCCATGG	2	30	Start Positio n	End Positio n
					136521	136550
					153923	153952
1	332444	GTCCCGAAATA CCGCTT	2	17	Start Positio n	End Positio n
					234156	234172
					282601	282617
1	332444	GTCCTCCCTG CTTGAGG	2	17	Start Positio n	End Positio n
					149635	149651
					150976	150992
1	332444	GTCCTTCAGCT GCAGCTGTGC C	2	22	Start Positio n	End Positio n
					136433	136454
					153835	153856
1	332444	GTCTAAGTATC CGAGCC	2	17	Start Positio n	End Positio n
					234623	234639
					283068	283084

1	332444	GTGAAATTTAT GTACCG	2	17	Start Positio n	End Positio n
					235156	235172
					283601	283617
1	332444	GTGAGGGGGA TGACACGCG TGCTTCGACG	2	30	Start Positio n	End Positio n
					135291	135320
					152693	152722
1	332444	GTGAGGTGTT GGGTTAAGTC	2	20	Start Positio n	End Positio n
					232335	232354
					280770	280789
1	332444	GTGATAAGCT GCGAAAA	2	17	Start Positio n	End Positio n
					233156	233172
					281601	281617
1	332444	GTGCCCACAC CCCTGAGCGT G	2	21	Start Positio n	End Positio n
					136450	136470
					153852	153872
1	332444	GTGCCGAGCA CGGATGTGT	2	19	Start Positio n	End Positio n
					135135	135153
					152537	152555

1	332444	GTGCGTGGTG TCAGTACTATC CCAGGCACC	2	30	Start Positio n	End Positio n
					136103	136132
					153505	153534
1	332444	GTGCTTGCCC GGGCCAGTGC GTGGATTCTT	2	30	Start Positio n	End Positio n
					136553	136582
					153955	153984
1	332444	GTGGAATCTGT AGATATTTG	2	20	Start Positio n	End Positio n
					231951	231970
					280386	280405
1	332444	GTGGCAAAGT ATATGCCAGAA GAGAGCCAC	2	30	Start Positio n	End Positio n
					135456	135485
					152858	152887
1	332444	GTGGCGTTCG GACCAGATGC	2	20	Start Positio n	End Positio n
					134951	134970
					152353	152372
1	332444	GTGGGTGTGC TTTGACACCAA CGGCAGGGA	2	30	Start Positio n	End Positio n
					136487	136516
					153889	153918

1	332444	GTGGTTTGTTT GGTGATTTC	2	19	Start Positio n	End Positio n
					135735	135753
					153137	153155
1	332444	GTGTAGTATAG GTGGGA	2	17	Start Positio n	End Positio n
					235256	235272
					283701	283717
1	332444	GTGTGTGCTG CGGGTATGTG	2	20	Start Positio n	End Positio n
					231135	231154
					279570	279589
1	332444	GTTACCGGCG TCGAGGGCGA AGGAGAAGCG	2	30	Start Positio n	End Positio n
					135875	135904
					153277	153306
1	332444	G TTCATTCAAC AGGTTGCC	2	19	Start Positio n	End Positio n
					135085	135103
					152487	152505
1	332444	GTTCCCGGGC CTTGTACACAC CGCCCGTCA	2	30	Start Positio n	End Positio n
					232638	232667
					281073	281102

1	332444	GTTTCGTGGTAA CACAAC	2	17	Start Positio n	End Positio n
					235006	235022
					283451	283467
1	332444	GTTCTGGTCCA GTGTGGCAT	2	20	Start Positio n	End Positio n
					136001	136020
					153403	153422
1	332444	GTTGAGGTGC TCCGCTT	2	17	Start Positio n	End Positio n
					154456	154472
					155685	155701
1	332444	GTTGAGGTTTC GGACCCTGG	2	20	Start Positio n	End Positio n
					231218	231237
					279653	279672
1	332444	GTTGCTACAGA GCGATGCGA	2	20	Start Positio n	End Positio n
					232501	232520
					280936	280955
1	332444	GTTGGTTACC GGCGTCGAGG GCGAAGGAGA	2	30	Start Positio n	End Positio n
					135871	135900
					153273	153302

1	332444	TAAAGGCACAA GGAGGC	2	17	Start Positio n	End Positio n
					235473	235489
					283918	283934
1	332444	TAAAGTTCTTT TGCCGACGAA GAATGAGGA	2	30	Start Positio n	End Positio n
					231688	231717
					280123	280152
1	332444	TAACCACACAG GAAGGACTGG	2	21	Start Positio n	End Positio n
					136300	136320
					153702	153722
1	332444	TAACGCGTGG GTAATCTGCC	2	20	Start Positio n	End Positio n
					231368	231387
					279803	279822
1	332444	TAACTATAACG GTCCTA	2	17	Start Positio n	End Positio n
					235056	235072
					283501	283517
1	332444	TAAGAATATTC CGCAATGGG	2	20	Start Positio n	End Positio n
					231618	231637
					280053	280072

1	332444	TAAGGCGCTC GAGAGAA	2	17	Start Positio n	End Positio n
					234806	234822
					283251	283267
1	332444	TAAGGCTAAAT ACTCGA	2	17	Start Positio n	End Positio n
					233573	233589
					282018	282034
1	332444	TAATTACGTGC CAGCAGCCG	2	20	Start Positio n	End Positio n
					231768	231787
					280203	280222
1	332444	TACAAGCGCC GCGAGCGCG	2	19	Start Positio n	End Positio n
					135635	135653
					153037	153055
1	332444	TACACGAAAAG GAGGGT	2	17	Start Positio n	End Positio n
					234423	234439
					282868	282884
1	332444	TACCCACTGTC AGGTAGGCCC CATAACAGT	2	30	Start Positio n	End Positio n
					136321	136350
					153723	153752

1	332444	TACGCCTGCAT AACCAGAAGC AGCACATAC	2	30	Start Positio n	End Positio n
					136637	136666
					154039	154068
1	332444	TACTGCTGGTC TAGAATCAC	2	20	Start Positio n	End Positio n
					231901	231920
					280336	280355
1	332444	TAGAACCTGAA ACCGTA	2	17	Start Positio n	End Positio n
					233656	233672
					282101	282117
1	332444	TAGCAAAGAC GCGTTTGCCA	2	20	Start Positio n	End Positio n
					135418	135437
					152820	152839
1	332444	TAGCCGAGTTT TGCCCCGGAG	2	21	Start Positio n	End Positio n
					136200	136220
					153602	153622
1	332444	TAGCCTCTAGA AATAGGGGG	2	20	Start Positio n	End Positio n
					231401	231420
					279836	279855

1	332444	TAGCGATACG CCTCTTGACA	2	20	Start Positio n	End Positio n
					232285	232304
					280720	280739
1	332444	TATCCCAGGC ACCATTGGAAA GGAAGGAGA	2	30	Start Positio n	End Positio n
					136120	136149
					153522	153551
1	332444	TCAAAGGAATT GACGGGGGC	2	20	Start Positio n	End Positio n
					232168	232187
					280603	280622
1	332444	TCAACAGTGAA ATACCA	2	17	Start Positio n	End Positio n
					235306	235322
					283751	283767
1	332444	TCAGCTGCAG CTGTGCCCAC ACCCCTGAGC	2	30	Start Positio n	End Positio n
					136438	136467
					153840	153869
1	332444	TCATGGCGAC GGGAAAT	2	17	Start Positio n	End Positio n
					234723	234739
					283168	283184

1	332444	TCCAAGTGTAG GGGTGGAATC TGTAGATAT	2	30	Start Positio n	End Positio n
					231938	231967
					280373	280402
1	332444	TCCCTATCTGC TATGGG	2	17	Start Positio n	End Positio n
					235756	235772
					284201	284217
1	332444	TCCCTGCCAG CTCCAACGTAA GCAGCCGCT	2	30	Start Positio n	End Positio n
					136021	136050
					153423	153452
1	332444	TCCTACTCCCC ACAGGAGTGC TGTTTTGTT	2	30	Start Positio n	End Positio n
					135938	135967
					153340	153369
1	332444	TCCTCGAGTA GCAGCTC	2	17	Start Positio n	End Positio n
					158489	158505
					158585	158601
1	332444	TCGAGAGGGA AACAGCC	2	17	Start Positio n	End Positio n
					234123	234139
					282568	282584

1	332444	TCGAGCTTAAG GAATCCGGCA AAATCAAAG	2	30	Start Positio n	End Positio n
					135372	135401
					152774	152803
1	332444	TCGAGGGTGA GTCGGCCTCC TACTCCCCAC	2	30	Start Positio n	End Positio n
					135921	135950
					153323	153352
1	332444	TCGATGATACG CGAGGAACC	2	20	Start Positio n	End Positio n
					232218	232237
					280653	280672
1	332444	TCGATGGCAG GACGCGT	2	17	Start Positio n	End Positio n
					234573	234589
					283018	283034
1	332444	TCGATGGGTAT CCGACCTGAG AGGGTGACC	2	30	Start Positio n	End Positio n
					231538	231567
					279973	280002
1	332444	TCTCGGCAAT GCCCATGTAA GGAGCGTCAG	2	30	Start Positio n	End Positio n
					134971	135000
					152373	152402

1	332444	TCTGAATAGGC ACGGGTGACA AAGGGTTTC	2	30	Start Positio n	End Positio n
					136254	136283
					153656	153685
1	332444	TCTGGTCCAGT GTGGCATTCC CTGCCAGCT	2	30	Start Positio n	End Positio n
					136003	136032
					153405	153434
1	332444	TCTTTGAGAGG AAAGGGGCT	2	20	Start Positio n	End Positio n
					231451	231470
					279886	279905
1	332444	TGAAGTCGTAA CAAGGTAGC	2	20	Start Positio n	End Positio n
					232751	232770
					281186	281205
1	332444	TGAAGTTGAGA AGGGAT	2	17	Start Positio n	End Positio n
					233073	233089
					281518	281534
1	332444	TGACAAAGGG TTTCCACAGCT GGGCAAAGT	2	30	Start Positio n	End Positio n
					136270	136299
					153672	153701

1	332444	TGACCAGGCC ATAAATCGCCC CCGGAATAG	2	30	Start Positio n	End Positio n
					155405	155434
					156538	156567
1	332444	TGACCTGCGG AGTGAGTACG CCTGCATAAC	2	30	Start Positio n	End Positio n
					136621	136650
					154023	154052
1	332444	TGACGGTCGA CGCCATAGGA A	2	21	Start Positio n	End Positio n
					136050	136070
					153452	153472
1	332444	TGAGCCTGCG ACCCATTAGCT TGTTGGTGG	2	30	Start Positio n	End Positio n
					231488	231517
					279923	279952
1	332444	TGAGCTTTTAG AAGACGCAAG	2	21	Start Positio n	End Positio n
					136400	136420
					153802	153822
1	332444	TGAGGAAGGT CGAAAGATTG	2	20	Start Positio n	End Positio n
					231668	231687
					280103	280122

1	332444	TGAGTACGCC TGCATAACCAG A	2	22	Start Positio n	End Positio n
					136633	136654
					154035	154056
1	332444	TGAGTCTCGG CGCCGACGCG	2	20	Start Positio n	End Positio n
					232101	232120
					280536	280555
1	332444	TGATCCTGGCT CAGAACGAA	2	20	Start Positio n	End Positio n
					231268	231287
					279703	279722
1	332444	TGCAGGGTTG CCTGGAAGGA A	2	21	Start Positio n	End Positio n
					136350	136370
					153752	153772
1	332444	TGCCATGGTG GAGAGGT	2	17	Start Positio n	End Positio n
					236106	236122
					284551	284567
1	332444	TGCCGGCAGT CAACGTG	2	17	Start Positio n	End Positio n
					234073	234089
					282518	282534

1	332444	TGCCGGTGAC AAACCGGAGG	2	20	Start Positio n	End Positio n
					232418	232437
					280853	280872
1	332444	TGCGAAACCC ATGGGTGTGC TTGCCCGGGC	2	30	Start Positio n	End Positio n
					136537	136566
					153939	153968
1	332444	TGCGAATAAG CCCCGGCTAA	2	20	Start Positio n	End Positio n
					231751	231770
					280186	280205
1	332444	TGCGACAAGG TTCGTAG	2	17	Start Positio n	End Positio n
					234106	234122
					282551	282567
1	332444	TGCGCAGATA ATGTATC	2	17	Start Positio n	End Positio n
					234273	234289
					282718	282734
1	332444	TGCGTGGATT CTTCTGGAAC GCAATGCCCC	2	30	Start Positio n	End Positio n
					136570	136599
					153972	154001

1	332444	TGCGTGGTGT CAGTACTATCC CAGGCACCA	2	30	Start Positio n	End Positio n
					136104	136133
					153506	153535
1	332444	TGCTCTCGGC AATGCCCATG	2	20	Start Positio n	End Positio n
					134968	134987
					152370	152389
1	332444	TGCTGGTGCG GTACCTG	2	17	Start Positio n	End Positio n
					233506	233522
					281951	281967
1	332444	TGCTTGCCCG GGCCAGTGCG TGGATTCTTC	2	30	Start Positio n	End Positio n
					136554	136583
					153956	153985
1	332444	TGGAAACGGG GTTTAGAATA	2	20	Start Positio n	End Positio n
					231235	231254
					279670	279689
1	332444	TGGATCCGGC AAAGGGA	2	17	Start Positio n	End Positio n
					235356	235372
					283801	283817

1	332444	TGGATGGGCT AGGGGGT	2	17	Start Positio n	End Positio n
					234023	234039
					282468	282484
1	332444	TGGATGTCTTG GAGTTG	2	17	Start Positio n	End Positio n
					233123	233139
					281568	281584
1	332444	TGGCATATTGA TAGTCCCAG	2	20	Start Positio n	End Positio n
					135218	135237
					152620	152639
1	332444	TGGGAACTGC ACTGGGTACT	2	20	Start Positio n	End Positio n
					231885	231904
					280320	280339
1	332444	TGGGTGAAGG TCATCTG	2	17	Start Positio n	End Positio n
					234473	234489
					282918	282934
1	332444	TGGGTGTGCT TTGACACCAAC GGCAGGGAA	2	30	Start Positio n	End Positio n
					136488	136517
					153890	153919

1	332444	TGGTAAGCCT GGTGTGAAAT	2	20	Start Positio n	End Positio n
					231851	231870
					280286	280305
1	332444	TGGTTACCGG CGTCGAGGGC GAAGGAGAAG	2	30	Start Positio n	End Positio n
					135873	135902
					153275	153304
1	332444	TGTCAC TTTCA TTCCGCAGA	2	20	Start Positio n	End Positio n
					134918	134937
					152320	152339
1	332444	TGTCGGAGGT AAAGCAC	2	17	Start Positio n	End Positio n
					234006	234022
					282451	282467
1	332444	TGTCGTCAGCT CGTGCCGTG	2	20	Start Positio n	End Positio n
					232318	232337
					280753	280772
1	332444	TGTGACTAGG AGTGAAA	2	17	Start Positio n	End Positio n
					233923	233939
					282368	282384

1	332444	TGTGCTGCGG GTATGTGGTG CGCGCGGAAT	2	30	Start Positio n	End Positio n
					231138	231167
					279573	279602
1	332444	TGTGGTGCGC GCGGAATGAT	2	20	Start Positio n	End Positio n
					231151	231170
					279586	279605
1	332444	TGTGTGGTGC AAGCCAGGCG	2	20	Start Positio n	End Positio n
					135151	135170
					152553	152572
1	332444	TGTGTTCCCG GGCCTTGTAC	2	20	Start Positio n	End Positio n
					232635	232654
					281070	281089
1	332444	TGTTAAAGCGA TTGGTTGTG	2	20	Start Positio n	End Positio n
					135118	135137
					152520	152539
1	332444	TGTTCGCCGT GTGGCGGAAG CCACACGGTA	2	30	Start Positio n	End Positio n
					232838	232867
					281273	281302

1	332444	TGTTGGTTACC GGCGTCGAGG GCGAAGGAG	2	30	Start Positio n	End Positio n
					135870	135899
					153272	153301
1	332444	TGTTTGGTAAG GAGGGTGAA	2	20	Start Positio n	End Positio n
					232735	232754
					281170	281189
1	332444	TTACCCGGGTT TGACATCAAGA GGAGCGCC	2	30	Start Positio n	End Positio n
					232238	232267
					280673	280702
1	332444	TTCAGCTGCA GCTGTGCCCA CACCCCTGAG	2	30	Start Positio n	End Positio n
					136437	136466
					153839	153868
1	332444	TTCATCCTTCT CCTTCA	2	17	Start Positio n	End Positio n
					236056	236072
					284501	284517
1	332444	TTCATGAAGTT GGAATCGCT	2	20	Start Positio n	End Positio n
					232585	232604
					281020	281039

1	332444	TTCCCTGCCA GCTCCAACGT AAGCAGCCGC	2	30	Start Positio n	End Positio n
					136020	136049
					153422	153451
1	332444	TTCCCTTTTGA AAAGGGG	2	18	Start Positio n	End Positio n
					232901	232918
					281336	281353
1	332444	TTCCTGGTGG CATCATGATA	2	20	Start Positio n	End Positio n
					135751	135770
					153153	153172
1	332444	TTCGAGGGTG AGTCGGCCTC CTACTCCCCA	2	30	Start Positio n	End Positio n
					135920	135949
					153322	153351
1	332444	TTCGGTACAAG TTGCGATAC	2	20	Start Positio n	End Positio n
					135618	135637
					153020	153039
1	332444	TTCGTTCTTGG AGTCTTCGG	2	20	Start Positio n	End Positio n
					135968	135987
					153370	153389

1	332444	TTCGTTTCTCT AGAGTGGCGG ACTGGTGAG	2	30	Start Positio n	End Positio n
					231338	231367
					279773	279802
1	332444	TTCTGAATAGG CACGGGTGAC AAAGGGTTT	2	30	Start Positio n	End Positio n
					136253	136282
					153655	153684
1	332444	TTGAAGGAGC GC	2	12	Start Positio n	End Positio n
					39402	39413
					140640	140651
1	332444	TTGATGACGGT AGTCGTGCG	2	20	Start Positio n	End Positio n
					231735	231754
					280170	280189
1	332444	TTGCAAGAGA CCGTACC	2	17	Start Positio n	End Positio n
					234756	234772
					283201	283217
1	332444	TTGCATCACCT GCCTGCCCAC TCACTCCCC	2	30	Start Positio n	End Positio n
					136688	136717
					154090	154119

1	332444	TTGGAAGAACA CCGGTGGCG	2	20	Start Positio n	End Positio n
					231968	231987
					280403	280422
1	332444	TTGGTAAGGA GGGTGAAGTC GTAACAAGGT	2	30	Start Positio n	End Positio n
					232738	232767
					281173	281202
1	332444	TTGGTTACCG GCGTCGAGGG CGAAGGAGAA	2	30	Start Positio n	End Positio n
					135872	135901
					153274	153303
1	332444	TTGTAAAGTTC TTTTGCCGA	2	20	Start Positio n	End Positio n
					231685	231704
					280120	280139
1	332444	TTGTGGGCCT GGTAGCCGAG TTTTGCCCCG	2	30	Start Positio n	End Positio n
					136188	136217
					153590	153619
1	332444	TTTCTAAGAGA AAGGGTATG	2	20	Start Positio n	End Positio n
					232801	232820
					281236	281255

1	332444	TTTGAGATGG GGATAGCCTC TAGAAATAGG	2	30	Start Positio n	End Positio n
					231388	231417
					279823	279852
1	332444	TTTTAAGCATG CAAGTCGAA	2	20	Start Positio n	End Positio n
					231301	231320
					279736	279755
1	332444	TTTTGGACGTA GGTCTTTGAGA GGAAAGGG	2	30	Start Positio n	End Positio n
					231438	231467
					279873	279902
1	332444	TTTTTGTTTCGT ACCGCCGTAC G	2	22	Start Positio n	End Positio n
					151353	151374
					151901	151922
332151	674942	AAAGGAAGGA GAGGAAACCG ATGTCCACAT	2	30	Start Positio n	End Positio n
					773	802
					341765	341794
332151	674942	AAATAGTCAGA CTATTGGTAGT	2	22	Start Positio n	End Positio n
					1151	1172
					342143	342164

332151	674942	AACCGATGTC CACATCTACTC CGCTGTTTC	2	30	Start Positio n	End Positio n
					788	817
					341780	341809
332151	674942	AACGCAATGC CCCACTGGAG CTGGGCTGTG	2	30	Start Positio n	End Positio n
					1222	1251
					342214	342243
332151	674942	AAGCAGCACA TACCATGCCC GCAAGTACCC	2	30	Start Positio n	End Positio n
					1289	1318
					342281	342310
332151	674942	AAGCCGGCGC CTGGTTCGAG GGTGAGTCGG	3	30	Start Positio n	End Positio n
					541	570
					2840	2869
					341533	341562
332151	674942	AAGCGGAAGC CGGCGCCTGG TTCGA	3	25	Start Positio n	End Positio n
					535	559
					2834	2858
					341527	341551
332151	674942	AAGCGTTGCAT CGGCCCCGAA GCCATACTT	2	30	Start Positio n	End Positio n
					705	734
					341697	341726

332151	674942	AAGGTAGTGG AGCCGGCCTC TGAGCGTGAG	12	30	Start Positio n	End Positio n
					130112	130141
					130172	130201
					130232	130261
					130292	130321
					130352	130381
					130412	130441
					130472	130501
					130532	130561
					130592	130621
					130652	130681
					130712	130741
					130772	130801
332151	674942	ACCAACGGCA GGGAAATAGT CAGACTATTG	2	30	Start Positio n	End Positio n
					1138	1167
					342130	342159
332151	674942	ACCGATGTCC ACATCTACTCC GCTGTTTCC	2	30	Start Positio n	End Positio n
					789	818
					341781	341810
332151	674942	ACGAATAACC GGCCAAACAC	2	20	Start Positio n	End Positio n
					339302	339321
					340092	340111

332151	674942	ACGCAATGCC CCACTGGAGC TGGGCTGTGC	2	30	Start Positio n	End Positio n
					1223	1252
					342215	342244
332151	674942	ACGCCTGCAT AACCAGAAGC AGCACATACC	2	30	Start Positio n	End Positio n
					1273	1302
					342265	342294
332151	674942	ACGTATACGG GATGCGGAAC TTAGCCAGCT	2	30	Start Positio n	End Positio n
					338938	338967
					339726	339755
332151	674942	ACGTGCCGAA GGTAGTGGAG CCGGCCTCTG	6	30	Start Positio n	End Positio n
					130224	130253
					130284	130313
					130344	130373
					130404	130433
					130584	130613
130764	130793					
332151	674942	ACTCCGCTGTT TCCCACATTGT GGGCCTGG	2	30	Start Positio n	End Positio n
					805	834
					341797	341826

332151	674942	ACTGGAGCTG GGCTGTGCCA C	2	21	Start Positio n	End Positio n
					1235	1255
					342227	342247
332151	674942	ACTGGTACCC ACTGTCAGGTA G	2	22	Start Positio n	End Positio n
					951	972
					341943	341964
332151	674942	AGAGCGGATT GTCCGCGCTG CG	2	22	Start Positio n	End Positio n
					120968	120989
					121001	121022
332151	674942	AGCCGGCCTC TGAGCGTGAG GGAGGGGAGC	12	30	Start Positio n	End Positio n
					130122	130151
					130182	130211
					130242	130271
					130302	130331
					130362	130391
					130422	130451
					130482	130511
					130542	130571
					130602	130631
					130662	130691
					130722	130751
130782	130811					

332151	674942	AGCGGTAGGT TTGGTAAAGGA CAGGGCCGT	2	30	Start Positio n	End Positio n
					1005	1034
					341997	342026
332151	674942	AGCGTGAGGG AGGGGAGCGT GAGGTGGAGG	12	30	Start Positio n	End Positio n
					130134	130163
					130194	130223
					130254	130283
					130314	130343
					130374	130403
					130434	130463
					130494	130523
					130554	130583
					130614	130643
					130674	130703
					130734	130763
					130794	130823
332151	674942	AGCGTGAGGT GGAGGACGCG CCGAAGGTAG	5	30	Start Positio n	End Positio n
					130149	130178
					130449	130478
					130509	130538
					130629	130658
					130689	130718

332151	674942	AGCGTGAGGT GGAGGACGTG CCGAAGGTAG	6	30	Start Positio n	End Positio n
					130209	130238
					130269	130298
					130329	130358
					130389	130418
					130569	130598
					130749	130778
332151	674942	AGCGTTGCAT CGGCCCCGAA GCCATACTTG	2	30	Start Positio n	End Positio n
					706	735
					341698	341727
332151	674942	AGCTGGGCAA AGTTAACCACA CAGGAAGGA	2	30	Start Positio n	End Positio n
					922	951
					341914	341943
332151	674942	AGGAAAGCGT TGCATCGGCC CC	2	22	Start Positio n	End Positio n
					701	722
					341693	341714
332151	674942	AGGAAGCGGT AGGTTTGGTAA A	2	22	Start Positio n	End Positio n
					1001	1022
					341993	342014

332151	674942	AGGACAGGGC CGTTGAGCTTT TAGAAGACG	2	30	Start Positio n	End Positio n
					1022	1051
					342014	342043
332151	674942	AGGACGCGCC GAAGGTAGTG GAGCCGGCCT	6	30	Start Positio n	End Positio n
					130101	130130
					130161	130190
					130461	130490
					130521	130550
					130641	130670
332151	674942	AGGACGTGCC GAAGGTAGTG GAGCCGGCCT	6	30	Start Positio n	End Positio n
					130221	130250
					130281	130310
					130341	130370
					130401	130430
					130581	130610
332151	674942	AGGGAGGGGA GCGTGAGGTG GAGGACGCGC	5	30	Start Positio n	End Positio n
					130140	130169
					130440	130469
					130500	130529
					130620	130649
332151	674942	AGGGAGGGGA GCGTGAGGTG GAGGACGCGC	5	30	130680	130709

332151	674942	AGGGAGGGGA GCGTGAGGTG GAGGACGTGC	7	30	Start Positio n	End Positio n
					130200	130229
					130260	130289
					130320	130349
					130380	130409
					130560	130589
					130740	130769
					130800	130829
332151	674942	AGGGCGAAGG AGAAGCGGAA GCCGGCGCCT	3	30	Start Positio n	End Positio n
					523	552
					2822	2851
					341515	341544
332151	674942	AGGGGAGCGT GAGGTGGAGG ACGTGCCGAA	6	30	Start Positio n	End Positio n
					130204	130233
					130264	130293
					130324	130353
					130384	130413
					130564	130593
					130744	130773
332151	674942	AGGGTTGCCT GGAAGGAAGC GGTAGGTTTG	2	30	Start Positio n	End Positio n
					988	1017
					341980	342009

332151	674942	AGGTAGTGGA GCCGGCCTCT GAGCGTGAGG	12	30	Start Positio n	End Positio n
					130113	130142
					130173	130202
					130233	130262
					130293	130322
					130353	130382
					130413	130442
					130473	130502
					130533	130562
					130593	130622
					130653	130682
					130713	130742
					130773	130802
332151	674942	AGGTGGAGGA CGCGCCGAAG GTAGTGGAGC	6	30	Start Positio n	End Positio n
					130095	130124
					130155	130184
					130455	130484
					130515	130544
					130635	130664
					130695	130724

332151	674942	AGGTGGAGGA CGTGCCGAAG GTAGTGGAGC	6	30	Start Positio n	End Positio n
					130215	130244
					130275	130304
					130335	130364
					130395	130424
					130575	130604
					130755	130784
332151	674942	AGTCAGACTAT TGGTAGTGCG AAACCCATG	2	30	Start Positio n	End Positio n
					1155	1184
					342147	342176
332151	674942	AGTGGAGCCG GCCTCTGAGC GTGAGGGAGG	12	30	Start Positio n	End Positio n
					130117	130146
					130177	130206
					130237	130266
					130297	130326
					130357	130386
					130417	130446
					130477	130506
					130537	130566
					130597	130626
					130657	130686
					130717	130746
					130777	130806

332151	674942	ATAGCGAGTG TCCTTTTCTGA ATAGGCACG	2	30	Start Positio n	End Positio n
					873	902
					341865	341894
332151	674942	ATCCCAGGCA CCATTGGAAA GGAAGGAGAG	2	30	Start Positio n	End Positio n
					756	785
					341748	341777
332151	674942	ATCCCCTTTGA G	2	12	Start Positio n	End Positio n
					229840	229851
					257540	257551
332151	674942	ATCTACTCCGC TGTTTCCCACA	2	22	Start Positio n	End Positio n
					801	822
					341793	341814
332151	674942	ATTGGAAAGG AAGGAGAGGA AA	2	22	Start Positio n	End Positio n
					768	789
					341760	341781
332151	674942	ATTGTGGGCC TGGTAGCCGA GTTTTGCCCC	2	30	Start Positio n	End Positio n
					822	851
					341814	341843

332151	674942	CACACAGGAA GGA CTGGTAC CCACTGTCAG	2	30	Start Positio n	End Positio n
					939	968
					341931	341960
332151	674942	CACCCCCAGC TGCACCGGCA C	2	21	Start Positio n	End Positio n
					339035	339055
					339823	339843
332151	674942	CAGGAGTGCT GTTTTGTTTC	2	21	Start Positio n	End Positio n
					585	605
					341577	341597
332151	674942	CATAGCGAGT GTCCTTTTCTG AATAGGCAC	2	30	Start Positio n	End Positio n
					872	901
					341864	341893
332151	674942	CCAACGGCAG GGAAATAGTCA GACTATTGG	2	30	Start Positio n	End Positio n
					1139	1168
					342131	342160
332151	674942	CCAACGTAAG CAGCCGCTGA CG	2	22	Start Positio n	End Positio n
					668	689
					341660	341681

332151	674942	CCACACAGGA AGGACTGGTA CCCACTGTCA	2	30	Start Positio n	End Positio n
					938	967
					341930	341959
332151	674942	CCACACCCCT GAGCGTGCCT CCCCTCGGCG	2	30	Start Positio n	End Positio n
					1089	1118
					342081	342110
332151	674942	CCACAGCTGG GCAAAGTTAAC C	2	22	Start Positio n	End Positio n
					918	939
					341910	341931
332151	674942	CCACATTGTG GGCCTGGTAG CC	2	22	Start Positio n	End Positio n
					818	839
					341810	341831
332151	674942	CCAGAAGCAG CACATACCATG	2	21	Start Positio n	End Positio n
					1285	1305
					342277	342297
332151	674942	CCAGTGCGTG GATTCTTCTGG A	2	22	Start Positio n	End Positio n
					1201	1222
					342193	342214

332151	674942	CCATGCCCCGCAAGTACCCCGC	2	22	Start Position	End Position
					1301	1322
					342293	342314
332151	674942	CCATGTAAGGAGCGTCAGCAA	2	21	Start Position	End Position
					220	240
					340577	340597
332151	674942	CCCACACCCCTGAGCGTGCTCCCTCGGC	2	30	Start Position	End Position
					1088	1117
					342080	342109
332151	674942	CCCACTCACTCCCCCTCCTCTCACTTCTAC	2	30	Start Position	End Position
					1339	1368
					342331	342360
332151	674942	CCCACTGGGCGCTGAGCTCCAC	2	22	Start Position	End Position
					253	274
					340610	340631
332151	674942	CCCGCAAGTACCCCGCTTGATCACCTGC	2	30	Start Position	End Position
					1306	1335
					342298	342327

332151	674942	CCCGCTTGCA TCACCTGCCT GC	2	22	Start Positio n	End Positio n
					1318	1339
					342310	342331
332151	674942	CCCTCCTCTCA CTTCTACCTCA	2	22	Start Positio n	End Positio n
					1351	1372
					342343	342364
332151	674942	CCGAAGGTAG TGGAGCCGCGC CTCTGAGCGT	12	30	Start Positio n	End Positio n
					130109	130138
					130169	130198
					130229	130258
					130289	130318
					130349	130378
					130409	130438
					130469	130498
					130529	130558
					130589	130618
					130649	130678
					130709	130738
130769	130798					
332151	674942	CCGAGTTTTGC CCCGGAGCCG GAGAAACCA	2	30	Start Positio n	End Positio n
					838	867
					341830	341859

332151	674942	CCGCCTCCTT GCGCCGGGCT TCCTCCGCCT	9	30	Start Positio n	End Positio n
					166699	166728
					166747	166776
					166795	166824
					166843	166872
					166891	166920
					166939	166968
					166987	167016
					167035	167064
					167083	167112
332151	674942	CCGGAGAAAC CAGGGGCATA GCGAGTGTCC	2	30	Start Positio n	End Positio n
					856	885
					341848	341877

332151	674942	CCGGCCTCTG AGCGTGAGGG AGGGGAGCGT	12	30	Start Positio n	End Positio n
					130124	130153
					130184	130213
					130244	130273
					130304	130333
					130364	130393
					130424	130453
					130484	130513
					130544	130573
					130604	130633
					130664	130693
					130724	130753
					130784	130813
332151	674942	CCGGGCTTCC TCCGCCTCCTT GCGCCGGGC	8	30	Start Positio n	End Positio n
					166712	166741
					166760	166789
					166808	166837
					166856	166885
					166904	166933
					166952	166981
					167000	167029
					167048	167077
332151	674942	CCGGTGAGCA GGTGGGTGTA GGGGTCA	2	27	Start Positio n	End Positio n
					1838	1864
					340927	340953

332151	674942	CCTCCCCTCG GCGGGTGTGG GTGTGCTTTG	2	30	Start Positio n	End Positio n
					1106	1135
					342098	342127
332151	674942	CCTCCGCCTC CTTGCGCCGG GCTTCCTCCG	8	30	Start Positio n	End Positio n
					166720	166749
					166768	166797
					166816	166845
					166864	166893
					166912	166941
					166960	166989
					167008	167037
					167056	167085
332151	674942	CCTCCTCAGG GG	2	12	Start Positio n	End Positio n
					45140	45151
					136990	137001

332151	674942	CCTCCTTGCG CCGGGCTTCC TCCGCCTCCT	9	30	Start Positio n	End Positio n
					166702	166731
					166750	166779
					166798	166827
					166846	166875
					166894	166923
					166942	166971
					166990	167019
					167038	167067
					167086	167115
332151	674942	CCTCTGAGCG TGAGGGAGGG GAGCGTGAGG	12	30	Start Positio n	End Positio n
					130128	130157
					130188	130217
					130248	130277
					130308	130337
					130368	130397
					130428	130457
					130488	130517
					130548	130577
					130608	130637
					130668	130697
					130728	130757
					130788	130817

332151	674942	CCTGCCCCACT CACTCCCCCT C	2	21	Start Positio n	End Positio n
					1335	1355
					342327	342347
332151	674942	CCTTGCAGGA GA	2	12	Start Positio n	End Positio n
					11440	11451
					102940	102951
332151	674942	CCTTGCGCCG GGCTTCCTCC GCCTCCTTGC	9	30	Start Positio n	End Positio n
					166705	166734
					166753	166782
					166801	166830
					166849	166878
					166897	166926
					166945	166974
					166993	167022
					167041	167070
					167089	167118
332151	674942	CGAAGCCATA CTTGCTGTGC GTGGTGTGTCAG	2	30	Start Positio n	End Positio n
					722	751
					341714	341743

332151	674942	CGAAGGAGAA GCGGAAGCCG GCGCCTGGTT	3	30	Start Positio n	End Positio n
					527	556
					2826	2855
					341519	341548
332151	674942	CGAAGGTAGT GGAGCCGGCC TCTGAGCGTG	12	30	Start Positio n	End Positio n
					130110	130139
					130170	130199
					130230	130259
					130290	130319
					130350	130379
					130410	130439
					130470	130499
					130530	130559
					130590	130619
					130650	130679
					130710	130739
					130770	130799
332151	674942	CGAGTTTTGCC CCGGAGCCGG AGAAACCAG	2	30	Start Positio n	End Positio n
					839	868
					341831	341860

332151	674942	CGCCGGGCTT CCTCCGCCTC CTTGCGCCGG	8	30	Start Positio n	End Positio n
					166710	166739
					166758	166787
					166806	166835
					166854	166883
					166902	166931
					166950	166979
					166998	167027
					167046	167075
332151	674942	CGCCTCCTTG CGCCGGGCTT CCTCCGCCTC	9	30	Start Positio n	End Positio n
					166700	166729
					166748	166777
					166796	166825
					166844	166873
					166892	166921
					166940	166969
					166988	167017
					167036	167065
167084	167113					

332151	674942	CGCGCCGAAG GTAGTGGAGC CGGCCTCTGA	6	30	Start Positio n	End Positio n
					130105	130134
					130165	130194
					130465	130494
					130525	130554
					130645	130674
					130705	130734
332151	674942	CGCGTGAGGA GGCAGAGCGG ATTGTCCGCG	2	30	Start Positio n	End Positio n
					120955	120984
					120988	121017
332151	674942	CGGAAGCCGG CGCCTGGTTC GAGGGTGAGT	3	30	Start Positio n	End Positio n
					538	567
					2837	2866
					341530	341559
332151	674942	CGGAGCCGGA GAAACCAGGG GC	2	22	Start Positio n	End Positio n
					851	872
					341843	341864
332151	674942	CGGATTGTCC GCGCTGCGCG TGAGGAGGCA	2	30	Start Positio n	End Positio n
					120972	121001
					121005	121034

332151	674942	CGGGTGACAA AGGGTTTCCA CA	2	22	Start Positio n	End Positio n
					901	922
					341893	341914
332151	674942	CGGTGACGC CATAGGAAAG CGTTGCATCG	2	30	Start Positio n	End Positio n
					688	717
					341680	341709
332151	674942	CGTAAGCAGC CGCTGACGGT CGACGCCATA	2	30	Start Positio n	End Positio n
					672	701
					341664	341693
332151	674942	CGTCGAGGGC GAAGGAGAAG CGGAAG	3	26	Start Positio n	End Positio n
					518	543
					2817	2842
					341510	341535

332151	674942	CGTGAGGGAG GGGAGCGTGA GGTGGAGGAC	12	30	Start Positio n	End Positio n
					130136	130165
					130196	130225
					130256	130285
					130316	130345
					130376	130405
					130436	130465
					130496	130525
					130556	130585
					130616	130645
					130676	130705
					130736	130765
					130796	130825
332151	674942	CGTGAGGTGG AGGACGTGCC GAAGGTAGTG	6	30	Start Positio n	End Positio n
					130211	130240
					130271	130300
					130331	130360
					130391	130420
					130571	130600
					130751	130780

332151	674942	CTCCTACTCCC CACAGGAGTG CTGTTTTGT	2	30	Start Positio n	End Positio n
					572	601
					341564	341593
332151	674942	CTCCTTGCGC CGGGCTTCCT CCGCCTCCTT	9	30	Start Positio n	End Positio n
					166703	166732
					166751	166780
					166799	166828
					166847	166876
					166895	166924
					166943	166972
					166991	167020
					167039	167068
					167087	167116
332151	674942	CTCTACTGCCA GGTCCTTCAG CTGCAGCTG	2	30	Start Positio n	End Positio n
					1056	1085
					342048	342077

332151	674942	CTCTGAGCGT GAGGGAGGGG AGCGTGAGGT	12	30	Start Positio n	End Positio n
					130129	130158
					130189	130218
					130249	130278
					130309	130338
					130369	130398
					130429	130458
					130489	130518
					130549	130578
					130609	130638
					130669	130698
					130729	130758
					130789	130818
332151	674942	CTCTGATATGC G	2	12	Start Positio n	End Positio n
					32240	32251
					218890	218901
332151	674942	CTGACCTGCG GAGTGAGTAC GCCTGCATAA	2	30	Start Positio n	End Positio n
					1255	1284
					342247	342276

332151	674942	CTTCCTCCGC CTCCTTGCGC CGGGCTTCCT	8	30	Start Positio n	End Positio n
					166717	166746
					166765	166794
					166813	166842
					166861	166890
					166909	166938
					166957	166986
					167005	167034
					167053	167082
332151	674942	CTTGCAATCACC TGCCTGCCCA CTCACTCCC	2	30	Start Positio n	End Positio n
					1322	1351
					342314	342343
332151	674942	CTTGCGCAGG CA	3	12	Start Positio n	End Positio n
					44990	45001
					140008	140019
					306155	306166

332151	674942	CTTGCGCCGG GCTTCCTCCG CCTCCTTGCG	9	30	Start Positio n	End Positio n
					166706	166735
					166754	166783
					166802	166831
					166850	166879
					166898	166927
					166946	166975
					166994	167023
					167042	167071
					167090	167119
332151	674942	CTTTTAGAAGA CGCAAGCTCT ACTGCCAGG	2	30	Start Positio n	End Positio n
					1039	1068
					342031	342060
332151	674942	CTTTTCTGAAT AGGCACGGGT	2	21	Start Positio n	End Positio n
					885	905
					341877	341897
332151	674942	GAAACGGTAG CCGTCGC	2	17	Start Positio n	End Positio n
					338985	339001
					339773	339789
332151	674942	GAAAGGAAGG AGAGGAAACC GATGTCCACA	2	30	Start Positio n	End Positio n
					772	801
					341764	341793

332151	674942	GAAGACCGGG CCAACGC	2	17	Start Positio n	End Positio n
					338918	338934
					339706	339722
332151	674942	GAAGCAGCAC ATACCATGCCC GCAAGTACC	2	30	Start Positio n	End Positio n
					1288	1317
					342280	342309
332151	674942	GAAGCCATACT TGCTGTGCGT GGTGTCAGT	2	30	Start Positio n	End Positio n
					723	752
					341715	341744
332151	674942	GAAGCCGGCG CCTGGTTCGA GGGTGAGTCG	3	30	Start Positio n	End Positio n
					540	569
					2839	2868
					341532	341561

332151	674942	GAAGGTAGTG GAGCCGGCCT CTGAGCGTGA	12	30	Start Positio n	End Positio n
					130111	130140
					130171	130200
					130231	130260
					130291	130320
					130351	130380
					130411	130440
					130471	130500
					130531	130560
					130591	130620
					130651	130680
					130711	130740
130771	130800					
332151	674942	GACAAAGGGT TTCCACAGCTG GGCAAAGTT	2	30	Start Positio n	End Positio n
					906	935
					341898	341927
332151	674942	GACACCAACG GCAGGGAAAT A	2	21	Start Positio n	End Positio n
					1135	1155
					342127	342147

332151	674942	GACGCGCCGA AGGTAGTGGA GCCGGCCTCT	6	30	Start Positio n	End Positio n
					130103	130132
					130163	130192
					130463	130492
					130523	130552
					130643	130672
					130703	130732
332151	674942	GACGTGCCGA AGGTAGTGGA GCCGGCCTCT	6	30	Start Positio n	End Positio n
					130223	130252
					130283	130312
					130343	130372
					130403	130432
					130583	130612
					130763	130792

332151	674942	GAGCGTGAGG TGGAGGACGC GCCGAAGGTA	5	30	Start Positio n	End Positio n
					130148	130177
					130448	130477
					130508	130537
					130628	130657
					130688	130717
332151	674942	GAGCGTGAGG TGGAGGACGT GCCGAAGGTA	6	30	Start Positio n	End Positio n
					130208	130237
					130268	130297
					130328	130357
					130388	130417
					130568	130597
332151	674942	GAGCTGGGCT GTGCCACTGA CCTGCGGAGT	2	30	Start Positio n	End Positio n
					1239	1268
					342231	342260
332151	674942	GAGGGAGGGG AGCGTGAGGT GGAGGACGCG	5	30	Start Positio n	End Positio n
					130139	130168
					130439	130468
					130499	130528
					130619	130648
					130679	130708

332151	674942	GAGGGAGGGG AGCGTGAGGT GGAGGACGTG	7	30	Start Positio n	End Positio n
					130199	130228
					130259	130288
					130319	130348
					130379	130408
					130559	130588
					130739	130768
					130799	130828
332151	674942	GAGGGCGAAG GAGAAGCGGA AGCCGGCGCC	3	30	Start Positio n	End Positio n
					522	551
					2821	2850
					341514	341543
332151	674942	GAGGGGAGCG TGAGGTGGAG GACGCGCCGA	5	30	Start Positio n	End Positio n
					130143	130172
					130443	130472
					130503	130532
					130623	130652
					130683	130712

332151	674942	GAGGGGAGCG TGAGGTGGAG GACGTGCCGA	6	30	Start Positio n	End Positio n
					130203	130232
					130263	130292
					130323	130352
					130383	130412
					130563	130592
					130743	130772
332151	674942	GCAACGTATAC GGGATGCGGA	2	21	Start Positio n	End Positio n
					338935	338955
					339723	339743
332151	674942	GCAAGCTCTA CTGCCAGGTC CT	2	22	Start Positio n	End Positio n
					1051	1072
					342043	342064
332151	674942	GCAGCGCTTTT T	2	12	Start Positio n	End Positio n
					80640	80651
					273890	273901
332151	674942	GCCACTGACC TGCGGAGTGA GT	2	22	Start Positio n	End Positio n
					1251	1272
					342243	342264

332151	674942	GCCCACTCAC TCCCCCTCCTC TCACTTCTA	2	30	Start Positio n	End Positio n
					1338	1367
					342330	342359
332151	674942	GCCCCATAAC AGTGCAGGGT TGCCTGGAAG	2	30	Start Positio n	End Positio n
					973	1002
					341965	341994
332151	674942	GCCCCGAAGC CATACTTGCTG T	2	22	Start Positio n	End Positio n
					718	739
					341710	341731
332151	674942	GCCCCGCAAGT ACCCCCGCTT GCATCACCTG	2	30	Start Positio n	End Positio n
					1305	1334
					342297	342326

332151	674942	GCCGAAGGTA GTGGAGCCGG CCTCTGAGCG	12	30	Start Positio n	End Positio n
					130108	130137
					130168	130197
					130228	130257
					130288	130317
					130348	130377
					130408	130437
					130468	130497
					130528	130557
					130588	130617
					130648	130677
					130708	130737
130768	130797					
332151	674942	GCCGGAGAAA CCAGGGGCAT AGCGAGTGTC	2	30	Start Positio n	End Positio n
					855	884
					341847	341876

332151	674942	GCCGGCCTCT GAGCGTGAGG GAGGGGAGCG	12	30	Start Positio n	End Positio n
					130123	130152
					130183	130212
					130243	130272
					130303	130332
					130363	130392
					130423	130452
					130483	130512
					130543	130572
					130603	130632
					130663	130692
					130723	130752
130783	130812					
332151	674942	GCCGGCGCCT GGTTCGAGGG TGAGTCGGCC	3	30	Start Positio n	End Positio n
					543	572
					2842	2871
					341535	341564

332151	674942	GCCGGGCTTC CTCCGCCTCC TTGCGCCGGG	8	30	Start Positio n	End Positio n
					166711	166740
					166759	166788
					166807	166836
					166855	166884
					166903	166932
					166951	166980
					166999	167028
					167047	167076
332151	674942	GCCTCCCCTC GGCGGGTGTG GGTGTGCTTT	2	30	Start Positio n	End Positio n
					1105	1134
					342097	342126
332151	674942	GCCTCCTTGC GCCGGGCTTC CTCCGCCTCC	9	30	Start Positio n	End Positio n
					166701	166730
					166749	166778
					166797	166826
					166845	166874
					166893	166922
					166941	166970
					166989	167018
					167037	167066
167085	167114					

332151	674942	GCGCCGAAGG TAGTGGAGCC GGCCTCTGAG	6	30	Start Positio n	End Positio n
					130106	130135
					130166	130195
					130466	130495
					130526	130555
					130646	130675
					130706	130735
332151	674942	GCGCCGGGCT TCCTCCGCCT CCTTGCGCCG	8	30	Start Positio n	End Positio n
					166709	166738
					166757	166786
					166805	166834
					166853	166882
					166901	166930
					166949	166978
					166997	167026
167045	167074					
332151	674942	GCGGAACTTA GCCAGCTTGG TG	2	22	Start Positio n	End Positio n
					338951	338972
					339739	339760
332151	674942	GCGGTAGGTT TGGTAAAGGA CAGGGCCGTT	2	30	Start Positio n	End Positio n
					1006	1035
					341998	342027

332151	674942	GCGTGAGGAG GCAGAGCGGA TTGTCCGCGC	2	30	Start Positio n	End Positio n
					120956	120985
					120989	121018
332151	674942	GCGTGAGGGA GGGGAGCGTG AGGTGGAGGA	12	30	Start Positio n	End Positio n
					130135	130164
					130195	130224
					130255	130284
					130315	130344
					130375	130404
					130435	130464
					130495	130524
					130555	130584
					130615	130644
					130675	130704
					130735	130764
					130795	130824
332151	674942	GCGTGAGGTG GAGGACGCGC CGAAGGTAGT	5	30	Start Positio n	End Positio n
					130150	130179
					130450	130479
					130510	130539
					130630	130659
					130690	130719

332151	674942	GCGTGAGGTG GAGGACGTGC CGAAGGTAGT	6	30	Start Positio n	End Positio n
					130210	130239
					130270	130299
					130330	130359
					130390	130419
					130570	130599
					130750	130779
332151	674942	GCGTGCCTCC CCTCGGCGGG TG	2	22	Start Positio n	End Positio n
					1101	1122
					342093	342114
332151	674942	GCGTGGATTC TTCTGGAACG CAATGCCCCA	2	30	Start Positio n	End Positio n
					1206	1235
					342198	342227
332151	674942	GCTCTACTGC CAGGTCCTTCA GCTGCAGCT	2	30	Start Positio n	End Positio n
					1055	1084
					342047	342076
332151	674942	GCTGGGCAAA GTTAACCACAC AGGAAGGAC	2	30	Start Positio n	End Positio n
					923	952
					341915	341944

332151	674942	GCTGTGCGTG GTGTCAGTACT	2	21	Start Positio n	End Positio n
					735	755
					341727	341747
332151	674942	GCTTCCTCCG CCTCCTTGCG CCGGGCTTCC	8	30	Start Positio n	End Positio n
					166716	166745
					166764	166793
					166812	166841
					166860	166889
					166908	166937
					166956	166985
					167004	167033
					167052	167081
332151	674942	GCTTTTAGAAG ACGCAAGCTC TACTGCCAG	2	30	Start Positio n	End Positio n
					1038	1067
					342030	342059
332151	674942	GGAAACCGAT GTCCACATCTA	2	21	Start Positio n	End Positio n
					785	805
					341777	341797
332151	674942	GGAAGCCGGC GCCTGGTTCG AGGGTGAGTC	3	30	Start Positio n	End Positio n
					539	568
					2838	2867
					341531	341560

332151	674942	GGACAGGGCC GTTGAGCTTTT AGAAGACGC	2	30	Start Positio n	End Positio n
					1023	1052
					342015	342044
332151	674942	GGACGCGCCG AAGGTAGTGG AGCCGGCCTC	6	30	Start Positio n	End Positio n
					130102	130131
					130162	130191
					130462	130491
					130522	130551
					130642	130671
					130702	130731
332151	674942	GGACGTGCCG AAGGTAGTGG AGCCGGCCTC	6	30	Start Positio n	End Positio n
					130222	130251
					130282	130311
					130342	130371
					130402	130431
					130582	130611
					130762	130791

332151	674942	GGAGCCGGCC TCTGAGCGTG AGGGAGGGGA	12	30	Start Positio n	End Positio n
					130120	130149
					130180	130209
					130240	130269
					130300	130329
					130360	130389
					130420	130449
					130480	130509
					130540	130569
					130600	130629
					130660	130689
					130720	130749
130780	130809					
332151	674942	GGAGCTGGGC TGTGCCACTG ACCTGCGGAG	2	30	Start Positio n	End Positio n
					1238	1267
					342230	342259
332151	674942	GGAGGACGTG CCGAAGGTAG TGGAGCCGGC	6	30	Start Positio n	End Positio n
					130219	130248
					130279	130308
					130339	130368
					130399	130428
					130579	130608
130759	130788					

332151	674942	GGAGGGGAGC GTGAGGTGGA GGACGCGCCG	5	30	Start Positio n	End Positio n
					130142	130171
					130442	130471
					130502	130531
					130622	130651
					130682	130711
332151	674942	GGAGGGGAGC GTGAGGTGGA GGACGTGCCG	8	30	Start Positio n	End Positio n
					130202	130231
					130262	130291
					130322	130351
					130382	130411
					130562	130591
					130742	130771
					130802	130831
					130862	130891
332151	674942	GGATTGTCCG CGCTGCGCGT GAGGAGGCAG	2	30	Start Positio n	End Positio n
					120973	121002
					121006	121035
332151	674942	GGCATTCCCT GCCAGCTCCA AC	2	22	Start Positio n	End Positio n
					651	672
					341643	341664

332151	674942	GGCCCCATAA CAGTGCAGGG TTGCCTGGAA	2	30	Start Positio n	End Positio n
					972	1001
					341964	341993
332151	674942	GGCCTCTGAG CGTGAGGGAG GGGAGCGTGA	12	30	Start Positio n	End Positio n
					130126	130155
					130186	130215
					130246	130275
					130306	130335
					130366	130395
					130426	130455
					130486	130515
					130546	130575
					130606	130635
					130666	130695
					130726	130755
					130786	130815
332151	674942	GGCGAAGGAG AAGCGGAAGC CGGCGCCTGG	3	30	Start Positio n	End Positio n
					525	554
					2824	2853
					341517	341546

332151	674942	GGCTTCCTCC GCCTCCTTGC GCCGGGCTTC	8	30	Start Positio n	End Positio n
					166715	166744
					166763	166792
					166811	166840
					166859	166888
					166907	166936
					166955	166984
					167003	167032
					167051	167080
332151	674942	GGGAGCGTGA GGTGGAGGAC GTGCCGAAGG	6	30	Start Positio n	End Positio n
					130206	130235
					130266	130295
					130326	130355
					130386	130415
					130566	130595
					130746	130775
332151	674942	GGGAGGGGAG CGTGAGGTGG AGGACGCGCC	5	30	Start Positio n	End Positio n
					130141	130170
					130441	130470
					130501	130530
					130621	130650
					130681	130710

332151	674942	GGGTGTGGGT GTGCTTTGACA C	2	22	Start Positio n	End Positio n
					1118	1139
					342110	342131
332151	674942	GGGTTGCCTG GAAGGAAGCG GTAGGTTTGG	2	30	Start Positio n	End Positio n
					989	1018
					341981	342010
332151	674942	GGTAGGCCCC ATAACAGTGCA G	2	22	Start Positio n	End Positio n
					968	989
					341960	341981
332151	674942	GGTAGTGGAG CCGGCCTCTG AGCGTGAGGG	12	30	Start Positio n	End Positio n
					130114	130143
					130174	130203
					130234	130263
					130294	130323
					130354	130383
					130414	130443
					130474	130503
					130534	130563
					130594	130623
					130654	130683
					130714	130743
130774	130803					

332151	674942	GGTCGACGCC ATAGGAAAGC GTTGCATCGG	2	30	Start Positio n	End Positio n
					689	718
					341681	341710
332151	674942	GGTGGAGGAC GCGCCGAAGG TAGTGGAGCC	6	30	Start Positio n	End Positio n
					130096	130125
					130156	130185
					130456	130485
					130516	130545
					130636	130665
130696	130725					
332151	674942	GGTGGAGGAC GTGCCGAAGG TAGTGGAGCC	6	30	Start Positio n	End Positio n
					130216	130245
					130276	130305
					130336	130365
					130396	130425
					130576	130605
130756	130785					
332151	674942	GGTGTGCTTG CCCGGGCCAG T	2	21	Start Positio n	End Positio n
					1185	1205
					342177	342197

332151	674942	GGTTACCGGC GTCGAGGGCG AAGGAGAAGC	3	30	Start Positio n	End Positio n
					509	538
					2808	2837
					341501	341530
332151	674942	GTAAAGGACA GGGCCGTTGA GC	2	22	Start Positio n	End Positio n
					1018	1039
					342010	342031
332151	674942	GTAAGCAGCC GCTGACGGTC GACGCCATAG	2	30	Start Positio n	End Positio n
					673	702
					341665	341694
332151	674942	GTACCCACTGT CAGGTAGGCC CCATAACAG	2	30	Start Positio n	End Positio n
					955	984
					341947	341976
332151	674942	GTACTATCCCA GGCACCATTG G	2	22	Start Positio n	End Positio n
					751	772
					341743	341764
332151	674942	GTAGTGCGAA ACCCATGGGT GT	2	22	Start Positio n	End Positio n
					1168	1189
					342160	342181

332151	674942	GTAGTGGAGC CGGCCTCTGA GCGTGAGGGA	12	30	Start Positio n	End Positio n
					130115	130144
					130175	130204
					130235	130264
					130295	130324
					130355	130384
					130415	130444
					130475	130504
					130535	130564
					130595	130624
					130655	130684
					130715	130744
					130775	130804
332151	674942	GTCAGACTATT GGTAGTGCGA AACCCATGG	2	30	Start Positio n	End Positio n
					1156	1185
					342148	342177
332151	674942	GTCCTTCAGCT GCAGCTGTGC C	2	22	Start Positio n	End Positio n
					1068	1089
					342060	342081

332151	674942	GTGAGGGAGG GGAGCGTGAG GTGGAGGACG	12	30	Start Positio n	End Positio n
					130137	130166
					130197	130226
					130257	130286
					130317	130346
					130377	130406
					130437	130466
					130497	130526
					130557	130586
					130617	130646
					130677	130706
					130737	130766
					130797	130826
332151	674942	GTGAGGTGGA GGACGCGCCG AAGGTAGTGG	6	30	Start Positio n	End Positio n
					130092	130121
					130152	130181
					130452	130481
					130512	130541
					130632	130661
					130692	130721

332151	674942	GTGAGGTGGA GGACGTGCCG AAGGTAGTGG	6	30	Start Positio n	End Positio n
					130212	130241
					130272	130301
					130332	130361
					130392	130421
					130572	130601
					130752	130781
332151	674942	GTGCCCACAC CCCTGAGCGT G	2	21	Start Positio n	End Positio n
					1085	1105
					342077	342097
332151	674942	GTGCCGAAGG TAGTGAGGCC GGCCTCTGAG	6	30	Start Positio n	End Positio n
					130226	130255
					130286	130315
					130346	130375
					130406	130435
					130586	130615
					130766	130795
332151	674942	GTGCGTGGTG TCAGTACTATC CCAGGCACC	2	30	Start Positio n	End Positio n
					738	767
					341730	341759

332151	674942	GTGCTTGCCC GGGCCAGTGC GTGGATTCTT	2	30	Start Positio n	End Positio n
					1188	1217
					342180	342209
332151	674942	GTGGAGCCGG CCTCTGAGCG TGAGGGAGGG	12	30	Start Positio n	End Positio n
					130118	130147
					130178	130207
					130238	130267
					130298	130327
					130358	130387
					130418	130447
					130478	130507
					130538	130567
					130598	130627
					130658	130687
					130718	130747
					130778	130807
332151	674942	GTGGAGGACG TGCCGAAGGT AGTGGAGCCG	6	30	Start Positio n	End Positio n
					130217	130246
					130277	130306
					130337	130366
					130397	130426
					130577	130606
					130757	130786

332151	674942	GTGGGTGTGC TTTGACACCAA CGGCAGGGA	2	30	Start Positio n	End Positio n
					1122	1151
					342114	342143
332151	674942	GTTACCGGCG TCGAGGGCGA AGGAGAAGCG	3	30	Start Positio n	End Positio n
					510	539
					2809	2838
					341502	341531
332151	674942	GTTGGTTACC GGCGTCGAGG GCGAAGGAGA	3	30	Start Positio n	End Positio n
					506	535
					2805	2834
					341498	341527
332151	674942	TAACCACACAG GAAGGACTGG	2	21	Start Positio n	End Positio n
					935	955
					341927	341947
332151	674942	TACCCACTGTC AGGTAGGCCC CATAACAGT	2	30	Start Positio n	End Positio n
					956	985
					341948	341977
332151	674942	TACGCCTGCAT AACCAGAAGC AGCACATAC	2	30	Start Positio n	End Positio n
					1272	1301
					342264	342293

332151	674942	TAGCCGAGTTT TGCCCCGGAG	2	21	Start Positio n	End Positio n
					835	855
					341827	341847
332151	674942	TAGTGGAGCC GGCCTCTGAG CGTGAGGGAG	12	30	Start Positio n	End Positio n
					130116	130145
					130176	130205
					130236	130265
					130296	130325
					130356	130385
					130416	130445
					130476	130505
					130536	130565
					130596	130625
					130656	130685
					130716	130745
130776	130805					
332151	674942	TATCCCAGGC ACCATTGGAAA GGAAGGAGA	2	30	Start Positio n	End Positio n
					755	784
					341747	341776
332151	674942	TATCGCTCCTA CTGCTGA	2	18	Start Positio n	End Positio n
					119037	119054
					146672	146689

332151	674942	TCAGCTGCAG CTGTGCCCAC ACCCCTGAGC	2	30	Start Positio n	End Positio n
					1073	1102
					342065	342094
332151	674942	TCCCTGCCAG CTCCAACGTAA GCAGCCGCT	2	30	Start Positio n	End Positio n
					656	685
					341648	341677
332151	674942	TCCGCACGGA ACGCCAC	2	17	Start Positio n	End Positio n
					339385	339401
					340175	340191
332151	674942	TCCGCCTCCTT GCGCCGGGCT TCCTCCGCC	9	30	Start Positio n	End Positio n
					166698	166727
					166746	166775
					166794	166823
					166842	166871
					166890	166919
					166938	166967
					166986	167015
					167034	167063
167082	167111					
332151	674942	TCCTACTCCCC ACAGGAGTGC TGTTTTGTT	2	30	Start Positio n	End Positio n
					573	602
					341565	341594

332151	674942	TCCTCCGCCT CCTTGCGCCG GGCTTCCTCC	8	30	Start Positio n	End Positio n
					166719	166748
					166767	166796
					166815	166844
					166863	166892
					166911	166940
					166959	166988
					167007	167036
					167055	167084
332151	674942	TCCTTGCGCC GGGCTTCCTC CGCCTCCTTG	9	30	Start Positio n	End Positio n
					166704	166733
					166752	166781
					166800	166829
					166848	166877
					166896	166925
					166944	166973
					166992	167021
					167040	167069
167088	167117					
332151	674942	TCGAGGGTGA GTCGGCCTCC TACTCCCCAC	2	30	Start Positio n	End Positio n
					556	585
					341548	341577

332151	674942	TCTGAATAGGC ACGGGTGACA AAGGGTTTC	2	30	Start Positio n	End Positio n
					889	918
					341881	341910
332151	674942	TCTGAGCGTG AGGGAGGGGA GCGTGAGGTG	12	30	Start Positio n	End Positio n
					130130	130159
					130190	130219
					130250	130279
					130310	130339
					130370	130399
					130430	130459
					130490	130519
					130550	130579
					130610	130639
					130670	130699
					130730	130759
130790	130819					
332151	674942	TCTTCTTGTTT T	2	12	Start Positio n	End Positio n
					183290	183301
					230740	230751
332151	674942	TGACAAAGGG TTTCCACAGCT GGGCAAAGT	2	30	Start Positio n	End Positio n
					905	934
					341897	341926

332151	674942	TGACCTGCGG AGTGAGTACG CCTGCATAAC	2	30	Start Positio n	End Positio n
					1256	1285
					342248	342277
332151	674942	TGACGGTCGA CGCCATAGGA A	2	21	Start Positio n	End Positio n
					685	705
					341677	341697
332151	674942	TGAGCGTGAG GGAGGGGAGC GTGAGGTGGA	12	30	Start Positio n	End Positio n
					130132	130161
					130192	130221
					130252	130281
					130312	130341
					130372	130401
					130432	130461
					130492	130521
					130552	130581
					130612	130641
					130672	130701
					130732	130761
130792	130821					
332151	674942	TGAGCTTTTAG AAGACGCAAG	2	21	Start Positio n	End Positio n
					1035	1055
					342027	342047

332151	674942	TGAGGGAGGG GAGCGTGAGG TGGAGGACGC	5	30	Start Positio n	End Positio n
					130138	130167
					130438	130467
					130498	130527
					130618	130647
					130678	130707
332151	674942	TGAGGGAGGG GAGCGTGAGG TGGAGGACGT	7	30	Start Positio n	End Positio n
					130198	130227
					130258	130287
					130318	130347
					130378	130407
					130558	130587
					130738	130767
					130798	130827
332151	674942	TGAGGTGGAG GACGCGCCGA AGGTAGTGGA	6	30	Start Positio n	End Positio n
					130093	130122
					130153	130182
					130453	130482
					130513	130542
					130633	130662
					130693	130722

332151	674942	TGAGGTGGAG GACGTGCCGA AGGTAGTGGA	6	30	Start Positio n	End Positio n
					130213	130242
					130273	130302
					130333	130362
					130393	130422
					130573	130602
					130753	130782
332151	674942	TGAGTACGCC TGCATAACCAG A	2	22	Start Positio n	End Positio n
					1268	1289
					342260	342281
332151	674942	TGCAGGGTTG CCTGGAAGGA A	2	21	Start Positio n	End Positio n
					985	1005
					341977	341997
332151	674942	TGCGAAACCC ATGGGTGTGC TTGCCCGGGC	2	30	Start Positio n	End Positio n
					1172	1201
					342164	342193

332151	674942	TGCGCCGGGC TTCCTCCGCCT CCTTGCGCC	8	30	Start Positio n	End Positio n
					166708	166737
					166756	166785
					166804	166833
					166852	166881
					166900	166929
					166948	166977
					166996	167025
					167044	167073
332151	674942	TGCGCGTGCG CG	3	12	Start Positio n	End Positio n
					64040	64051
					155990	156001
					193247	193258
332151	674942	TGCGTGGATT CTTCTGGAAC GCAATGCCCC	2	30	Start Positio n	End Positio n
					1205	1234
					342197	342226
332151	674942	TGCGTGGTGT CAGTACTATCC CAGGCACCA	2	30	Start Positio n	End Positio n
					739	768
					341731	341760
332151	674942	TGCTTGCCCG GGCCAGTGCG TGGATTCTTC	2	30	Start Positio n	End Positio n
					1189	1218
					342181	342210

332151	674942	TGGAGCCGGC CTCTGAGCGT GAGGGAGGGG	12	30	Start Positio n	End Positio n
					130119	130148
					130179	130208
					130239	130268
					130299	130328
					130359	130388
					130419	130448
					130479	130508
					130539	130568
					130599	130628
					130659	130688
					130719	130748
130779	130808					
332151	674942	TGGAGGACGT GCCGAAGGTA GTGGAGCCGG	6	30	Start Positio n	End Positio n
					130218	130247
					130278	130307
					130338	130367
					130398	130427
					130578	130607
					130758	130787
332151	674942	TGGGTGTGCT TTGACACCAAC GGCAGGGAA	2	30	Start Positio n	End Positio n
					1123	1152
					342115	342144

332151	674942	TGGTTACCGG CGTCGAGGGC GAAGGAGAAG	3	30	Start Positio n	End Positio n
					508	537
					2807	2836
					341500	341529
332151	674942	TGTTGGTTACC GGCGTCGAGG GCGAAGGAG	3	30	Start Positio n	End Positio n
					505	534
					2804	2833
					341497	341526
332151	674942	TTCAGCTGCA GCTGTGCCCA CACCCCTGAG	2	30	Start Positio n	End Positio n
					1072	1101
					342064	342093
332151	674942	TTCCCTGCCA GCTCCAACGT AAGCAGCCGC	2	30	Start Positio n	End Positio n
					655	684
					341647	341676

332151	674942	TTCCTCCGCCT CCTTGCGCCG GGCTTCCTC	8	30	Start Positio n	End Positio n
					166718	166747
					166766	166795
					166814	166843
					166862	166891
					166910	166939
					166958	166987
					167006	167035
					167054	167083
332151	674942	TTCGAGGGTG AGTCGGCCTC CTACTCCCCA	2	30	Start Positio n	End Positio n
					555	584
					341547	341576
332151	674942	TTCTGAATAGG CACGGGTGAC AAAGGGTTT	2	30	Start Positio n	End Positio n
					888	917
					341880	341909
332151	674942	TTGCATCACCT GCCTGCCCAC TCACTCCCC	2	30	Start Positio n	End Positio n
					1323	1352
					342315	342344

332151	674942	TTGCGCCGGG CTTCCTCCGC CTCCTTGCGC	9	30	Start Position	End Position
					166707	166736
					166755	166784
					166803	166832
					166851	166880
					166899	166928
					166947	166976
					166995	167024
					167043	167072
					167091	167120
332151	674942	TTGGTTACCG GCGTCGAGGG CGAAGGAGAA	3	30	Start Position	End Position
					507	536
					2806	2835
					341499	341528
332151	674942	TTGTGGGCCT GGTAGCCGAG TTTTGCCCCG	2	30	Start Position	End Position
					823	852
					341815	341844
674501	976001	AGTGCACGAG CACTCCT	2	17	Start Position	End Position
					96385	96401
674501	976001	CAAGGACTGC GACTGTAAGT	2	21	Start Position	End Position
					261001	261021
					262302	262322

674501	976001	CTTGCGCAGG CA	2	12	Start Positio n	End Positio n
					46272	46283
					243040	243051
674501	976001	GCGCGCCCCT GCGGGGG	2	17	Start Positio n	End Positio n
					5551	5567
					70185	70201
674501	976001	GCTGCGCGCA AGGCCGCCG	3	19	Start Positio n	End Positio n
					162535	162553
					162628	162646
674501	976001	GTCGGGCAAC TGGGGAT	2	17	Start Positio n	End Positio n
					260551	260567
					261873	261889
976058	1138408	AGTGACAGAG CACTCCT	2	17	Start Positio n	End Positio n
					13568	13584
976058	1138408	CACAGAACAG GA	2	12	Start Positio n	End Positio n
					5140	5151
					39440	39451

SRGD Performance Metrics

Initial Reads Count:	52032
Reads Count after Removing Duplication:	22765
Reads Count after Overlapping:	11714
Initial Dataset Size in (Base):	15646281
Dataset Sizet after Removing Duplication:	6852265
Dataset Size after Overlapping:	4076726

Overlapping Metrics

Repeat Identification Time:	00h:03m:23s:000ms
Overlapping Time:	00h:23m:04s:000ms
Total Assembly Time:	02h:47m:52s:000ms

Overlapping Length	O(N) ² Time Complexity	Hit Index Count	Overlapping Matched Count	RI
299	443556	188	31	1
299	137241225	42743	1	0,1
294	488365801	154908	3	0
292	488233216	155511	1	0
260	488189025	155577	2	0
258	488100649	155855	2	0
251	488012281	177031	11011	0