**Supplementary Information S4**. The independent dataset contains 100 strong enhancers, 100 weak enhancers, and 200 non-enhancers. None of the sequences included has  $\geq$  80% pairwise sequence identity with any other in a same subset and the benchmark dataset.

## (1) 100 strong enhancers

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TCTCA

>Chr11 65187024 65187224

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GTAATCGCAGCACTTTGGGAGGTCAAGGCAGGTGGATCACTTGAGGTCAGGAGTTGGAGACCAGC
CTGGC

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>Chr16 87812299 87812499

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>Chr19 39177160 39177360

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>Chr22 36726454 36726654

>Chr20 30160339 30160539

>Chr20 30160539 30160739

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>Chr17 42172674 42172874

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>Chr22 30592000 30592200

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>Chr11 47429024 47429224

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>Chr16 21513899 21514099

>Chr15 89181396 89181596

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>Chr2 43448296 43448496

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>Chr1 38465813 38466013

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>Chr3 133291710 133291910

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>Chr1 38465613 38465813

>Chr1 38466813 38467013

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## (2) 100 weak enhancers

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TTCATGCCCAGGTGGAGCCACTTTAGTAAAAAAAAAAATAGCATTTTTGCTGCCATGTGATGCACAGG
TAAAACAGACCACTGGATACTGCTGGTTTGCATTCCTGCTTCCTGGGAAGTTCTCCCTTCCATTT
CATGAGCCTCTTTGGGAAAGGTACAAACTTAGGGAATTACTGACACAGAATAGGAACAATTGGCA
ATCCT

>hg19\_ct\_UserTrack\_3545\_7241 range=chr9:124708580-124710379 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

TAAAGATCCTGTTCCAGGTAGCCCAGCTCTCAAGCAGAAAAATGGGGACTAAAACCAGGTATGTC CAGGT

>hg19\_ct\_UserTrack\_3545\_3021 range=chr13:55147000-55147399 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_1

ACAAACAGAAAGGACATCCACACCAAAAACCCATCTGTACATCACCATCATCAAGGATAAGTGGT
CTACCCAATAACAAGCAATAATATGCCAGATACAGTGGCTCATGCCTGTAATCCCAGCACTTTGG
GAGGCCAAGAGGGGCAGATCACTTGAGGTCAGGAGTTCGAGACCAAACTGACCAACATGGTGAAA
CCCCA

>hg19\_ct\_UserTrack\_3545\_2621 range=chr10:33269995-33270194 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_6150 range=chr6:66276880-66277679 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

>hg19\_ct\_UserTrack\_3545\_1282 range=chr10:14922595-14922994 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

TAAAAGTTTGGCTTTAAAAACAGTACAGTCCATAAGTATTACAAAATATCGATATACTCCATTTT
TTTAATAACTGGAGTTTATTCACCTTGGTGATAATATATTGCAGTATGGGTAGAATAAAAAGTGG
AATTAAAGCTTCATGCAACATATCAAAGAGAAAACTAACATATAATGAGTTTGTAACCGTAGAAA
TATAT

>hg19\_ct\_UserTrack\_3545\_2483 range=chr7:28520676-28521475 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

ACGCAATCCCAAAGGGGGCTGTGATTCAGGTTGTAGGATTCTGAGCTTTTGGGATACCAGGGGAT GGCAAATATCTTTGAAGAACAGGGATATTCTTCTGGTTTGAACAGAATAGTAATATTTAACCGCA GTGTTATGTGTCAAGTTCAGGCCTTCTGGGGGAGACTACTGGCTCTAAACTGCCCAGGAACACAC CCTCT

>hg19\_ct\_UserTrack\_3545\_5595 range=chr9:103116780-1031181795'pad=0
3'pad=0 strand=+ repeatMasking=none 4

>hg19\_ct\_UserTrack\_3545\_2904 range=chr22:39864855-39865854 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

 ${\tt CAGCTCAGCCGAATCCTCCAGGAACAGGCACGGAGATTGAAGGGTGAGATTACACAGAAACTTCT}\\ {\tt GTGCCTCCTTGAGGGACTTGGACTTTCTCCTGAGGGCAGCGGTTCCAAGCTGGGAGGGGCAGCAT}\\ {\tt CAGATGTGGCTTTCGCTTGGCTCATGGGGGCCCGGGTTGGGGGCCCATTGAGGAAGCTGCTGCCAT}\\ {\tt TCCGG}\\ {\tt T$ 

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>hg19 ct UserTrack 3545 9202 range=chr10:123874411-123874810
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
GAAACGTGCTTGAACATTTAAAATATTTTTAGCAAGAAGGAAAGTTAAAGATCAAGGTTTCGTTTT
{\tt ACAGATACGAAAAGAGACTCAAAGAAGTCCAGGGTCTTGGCCAGGGCCACACATCAAGGTAGG}
ACTCCAACCCCAGACCGCAGACACTTGCCCTGGTGTTCTCTGCGCCCAAGTCCTGCGGCCTCGTTG
GTTTT
>hg19 ct UserTrack 3545 9648
                                   range=chr11:120971191-120971590
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
{\tt AGTTTTGCTCATTCCACATCTACTGGATGCTTGGAAGCATCTAACCGAGCACGTTTTCCTCTTAT}
{\tt TCACATGCCTTTTAAACTATTTACTTACTGCAAATTTTTTATCAGAAGGGGTTTATCTCCCCCCT}
\tt CTGCCTCCAGTGACCCTCACTGGGTGTTAGGGAAGGTTTCCAGGCCACAGTTTGAGATTTCCCTT
GTGGA
>hg19 ct UserTrack 3545 5052 range=chr19:51910989-51911588 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
\verb|CCTTGCAGCATCCTTCCCACTCTAAGCTTAAAGGAGACTGTGTAACCAGCAGTGCTCACCCATCC| \\
\tt TGGGCCTGAGTTTGAATCCCAGCTCTGGAGTTCAGCTGTGTGACATGCAAGACCTTGTCCCTCTC
TGAAGTCCTTCTGTAAAATGAGGTGGCTGCATTGGGTGATCCCATTCCACACCATGAGTCTATAG
TCCTA
>hg19 ct UserTrack 3545 695 range=chr22:24190001-24191000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2
\tt CACCCCTTCCAAGAGGCCCTGCTTAGAGGCCCCCTCCGCCCCAAGGAATGCAGGCATCAGTGCT
TCAGACTCTGGCCTAACCACCGTCCCCACCTCCCAGGCCCCCACCCTTTCCCTCCAGATGTGGGC
ACAGCTGTATTTTTAGAACAGCCGACCACGAGGACATTCTTTCCTTCTAATTAAGATGGCTTCAA
ATCTC
>hg19 ct UserTrack 3545 10029
                              range=chr7:133635861-133636060
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
\tt CAGCTCCCATTCCTGCAAAACAAATGAGGAGGGTGCTTTTCTTGAATGCTGTGCCTGGACTTTC
TCTCCCTTGACCCAGCCCTACCCATGGAATACCAAGGCAACCTCAACATCTGTTACACTCCTGCC
TTAATTCTATTCCTCAGCACCAGCATAACTCAATAGAGGAGTATGGGCTTGTCCTTGGACAAGGT
ACTTG
>hg19 ct UserTrack 3545 8904 range=chr8:132997819-132998218 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1
CAGTTCATTGGAGGAGCCAGTCCACACAAGTGCCTGGAGACCTTGTACACAGGCTGCAAAAGGTA
ATGCAGCAGGTGGAGGTGATTTGTAAAGCGATTTCCAAAATAGTGCATTTGAGAAAATAGA
TATTCTTGCTTTATTATATAGGCTTAATCAAATGTAATGTGTCATCATTTTTTTGCTTTATATAT
TATTT
>hg19 ct UserTrack 3545 10628
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5'pad=0 3'pad=0 strand=+ repeatMasking=none 1
\tt GGGAACTAAGATATTTGGTAACAGAAGATGGTTGTGAACTCTACTGAAGTGGGGTAGAGGGAAA
TAAGAGTTCTAATTTAATCACATTGGAAACCTTTCAGGTCAAGAAAAAATTATGCTTCCTATA
GCAAGCTATCAAAACTTACATACTTTAAAATATAAGACCATTTATCTTTTCTCATGGGACTCAGA
GTTCC
>hg19 ct UserTrack 3545 5887
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5'pad=0 3'pad=0 strand=+ repeatMasking=none 2
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>hg19\_ct\_UserTrack\_3545\_8816 range=chr7:121096565-121097564 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

>hg19\_ct\_UserTrack\_3545\_6900 range=chr6:83779082-83779881 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2

GTGGAGTGTAGTTATTGATTTTATTCAAAATGGCATTTTGAGGTTCCAACAAGTGAAGACTTGTT
GATAATGGCATCACTTTTGCTGTGATGATTTCTCCTTATAGTCATGCATTCCTAAAATGAAATTA
TGGTAGAAGCCACCCAAAATGTGCTTACTGTGTAATAACTACCTATTTTAAGAGCTTATATCATG
GAAAA

>hg19\_ct\_UserTrack\_3545\_232 range=chr11:1330825-1331024 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_6082 range=chr10:84519421-84520020 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

AGAAACAGCGGAAGGAAGGATGGTAGGTAACAGTCGGCACAAGACACACAAAGAGGAAACTCTAT
GGGTTCTGCATGCGTGAGTTGCTGAAAATGAGCTTTAAGGTTAAAGCCAGGAGTTTGGAATTAAT
GTGTAGCATGTGAAATATAAAAAACTCCATTCAATGCCCTCAATTTTATCAGAGGATTAGGGTAA
CCTCC

>hg19\_ct\_UserTrack\_3545\_2631 range=chr12:29224734-29225333 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_2008 range=chr8:23313456-23314255 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

CATTTCCTATTAGAGGTAGAAGAATATAAGCCATAGATTCAACATGCAACAACTACAAGACCTCT
GTTAAGGTAAACAGAAATAAACGATTCAACTACACGAATTAGTGTTCCATTTTATAATTCTAC
TATGTCAAACAGAATTAACAAACCTGATACAAAAACATCAAATATATGGTAACACAAATAATATA
ACTCT

>hg19\_ct\_UserTrack\_3545\_3152 range=chr19:35631561-35632360 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

 $\tt TTTCCTGTCTGTGTCTATCTGTGTCACTGTCTATGTGATACCTCTCTGGTTCTCTTTCTCTTGCC\\ \tt TGCGT\\$ 

>hg19\_ct\_UserTrack\_3545\_1589 range=chr22:30000801-30001000 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_0

>hg19\_ct\_UserTrack\_3545\_3843 range=chr19:42381761-42382760 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

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ATCATCAGAAAAAGGAACAATTAATTGCTTGCTGAGCATGTGCAAATTTACAAAACAATTTGGCT
TTTCAGATGGAATTTGAAGGCCTGAATTATTTAAGTCAACTGAAACTACTACTACTGTGAATAGA
GGCACAACGACCCTTATATAGTGACATAATCATCACATCCTTCTGGTTAATAACATATTTCACAG
CAGTC

>hg19\_ct\_UserTrack\_3545\_1738 range=chr10:21583995-21586194 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_9

GCCTGGAGTGCAGTGGGGAGATCTCCGCTCACTGCAACCTCCGCCTCCCAGCTTCAAGTGATTCT
CCTGCCTCAGCCTCCAGAGTAGCTGAAATTACAGGCGCCTGCCACCACACCTGGCTAATTCTTGT
ATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGGCCTCCAGTA
AGTAA

>hg19\_ct\_UserTrack\_3545\_7734 range=chr9:128453580-128454179 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_1143 range=chr12:8716934-8717733 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2

GGAAGGGGCTCCCCTGCCCCGCAGGTGCCGCCCCGAGGAGGTGGAGGAGGAGGAGCCGGGCACT
GACTGGGGACCCAGGTGAGTCTAGCAAATGACAAGGCCCAACGGTCAAAACCGCCTCAGTAATGC
GCTCGTCCAAAGCACGCACTTAACGCTCAATCCTGGTGTCGCGTCCCGTTGCCAGGCAACGAAAG
CAAGC

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>hg19 ct UserTrack 3545 764 range=chr7:6297476-6298275
                                                    5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
\tt TGTGGAGGTAGGGAGGTTCCTGGGTGGAAATTCAGCAACAGCACCATCTAGAATCCCGCTGG
{\tt GCTACTCATCCAGGTCCAACAAGTCTAGCATAAGAAATGCAACAGGGCTGGGCACGGTGGCTCA}
CTCCT
>hg19 ct UserTrack 3545 6687 range=chr9:119065780-119066779 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2
{\tt TTATTTCTTCATTCACTTTTTGTTTATGTTTACATCACTAAAGCCTTTATTCATTTGCATTTATT}
TTTGAATGCCCTCAGGAGAGTGGAAACAAATGGTAACATGGCATTTCCTGATGCTTAACAATGTA
CATCC
>hg19 ct UserTrack 3545 7969
                               range=chr12:110072818-110073417
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
CGCCATCATGATCACCACCACAATCATCACCACCACTGTCACCACCACCACCGTCACCACCATTA
CCACC
>hg19 ct UserTrack 3545 1396 range=chr4:16078903-16079902 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3
\tt AAACATCCCCTTTCCACCTCACCCGAATCCAAAGTAGAAGGGCATGGCCTCAAGTCTAGGGAC
\tt CACACCGTTTGAGGCTGGAACACTGTGCAACACTGGAACCTGTCTTTCTAATAAGCTTACCAAGT
AATCCTGATGGAAATCTTCACCCTAAGTCACCACCTCTACAACTAGGGGTCTCAGAGATGAAAGC
CAGGG
>hg19 ct UserTrack 3545 3715 range=chr16:49782100-49783499 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2
TAGCTGGTTGCTAAGAAATCACACCGGGTGACATCACCTGATCACTTACTACAGGCAAGACATGG
{\tt CCAGGGTCAGAGTTCAAAACAGTTTCTGGAAATCTTTCCAGCGAAGCCCCTTTTCCGTGCAGGGA}
\tt TGGGAGGATGGGAAAGTATCTTGATGGGTACCCACCTGTGACCCCTGCCCTATGACAGAGGTAC
TATTA
>hg19 ct UserTrack 3545 11269
                               range=chr5:175065595-175067994
5'pad=0 3'pad=0 strand=+ repeatMasking=none 5
{\tt TCCTCTGGGGGTCCCCAACAAGGGGCAGGGAGCAGTGCAGGGGGAGTGCCTCAGACCTCAGACCCC}
{\tt AGGCTACGCGACCTGGATCCAGGTCCCAGCTCTGCCTCTCGGTAGCAGGGCAACTTGGGCAAGTT}
GTTAACCTCTCTGGGCCTCAGTTTCCCTGTGAGCAAAGTAAAGATGCTGCTAGTAATCACACCTA
TCTCA
>hq19 ct UserTrack 3545 968
                         range=chr4:8281901-8282100
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3'pad=0 strand=+ repeatMasking=none 0
GGAGAGGTAATATGGTCCCACCTGGGGGCTGTGCCCGTGCCCTGGCGCTTCTCCTCAGGCGAGGC
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>hg19\_ct\_UserTrack\_3545\_4850 range=chr7:64735166-64736365 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_2

GGTCT

 ${\tt TGTTCATATATGGTTGTTTATTAAACTATTTATCATGAAAGTATGTAAGTGGCATGCTTAATGTC} \\ {\tt TGAAAGAGATAGAGACTTCAGCTTTTCCTGTTGAGGGTATAAAATTTAAGTGCCTTACTATTTCCT} \\ {\tt TACAATATTCTATAAACACTGTGTTTGAGTGATTTTGCTGTTTTCTTTAAACACTGGGCATTAGT} \\ {\tt TTTAA} \\$ 

>hg19\_ct\_UserTrack\_3545\_1633 range=chr5:29524844-29525043 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_2583 range=chr22:38367855-38368654 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2

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AACCGGAACCTTTAATTTTATTATGTGGAATGCTTAATGCAGAGTTAATAGGGGCTAGAGTGGCT
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TGCAG

>hg19\_ct\_UserTrack\_3545\_4451 range=chr17:42174275-42175474 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2

AAACCAGGCTCTGAGGCTAAGAGGCCAAGGCGACTGCAGTAGGCAGCCTCTAAATAATAGTACCA
ATGTCTCCTGTCTCAGTATTCACACCCTTCTGCAATCCCCTTCCCTTTGAGCGTGGCCTGGACCTA
GTGCCCGACATCTAATGAACTGAGTACAGCAAAAGTGATGGGAGGTTACTTATCAGATCAGGTTA
TAGAA

>hg19\_ct\_UserTrack\_3545\_7141 range=chr3:98442511-98442710 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_0

TCCATCTCAAGAAGGTAACAGAGCTTTGGTGTTCTGTTGGCTCAGTGATTTTTTGGTTACAGAAT
AAAAACTAAAAGTCACCAGATATCCAGAAGACAACTCAACTTGTGTTTCTTTTGTTTAGAAATCT
TAGACTGATTGAGTCAGAGAAGCAGGAGTCCACTGTTGTGCTTCATGTTAGGGGAATGAGCGTGG
CGAGG

>hg19\_ct\_UserTrack\_3545\_1613 range=chr16:13262700-13263099 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

 ${\tt TTGCTTTTGGATTTCCAACTCTCTGTATACAATGACCCCTACGGAAGACCTCACACCTGTTTCAG} \\ {\tt AGAAGAGAATAATACCCGCCCCTGGGTTTGGCCATTTCCTTTGTCTTACAGTTGTCATGGGATCT} \\ {\tt AGAAGAGAATAATACCAGAGAGAATAATACAATGAATACAATACAATGAATACAAT$ 

 ${\tt TCACCCTCCCAGCTCCATTGGAAGGTCAGTTGCAGTGCAGCCCTTTTCCGGGGTAATAAGTTTT}\\ {\tt TAATG}$ 

>hg19\_ct\_UserTrack\_3545\_379 range=chr22:20244001-20244600 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

GCCTGCAGGAAGCCATGCCCCGTCCCGCTCACTCCTCCACTGGCTGCTTCTCCGACCCCGATCAT
GGCTGCAGCAGGCCTGGAGGCCCGGTCACCCCCAGGCCCAGTCACACATGGCCCTACTCAGGCACCA
CCTGTGCTTCTTGGCTGGGTTTCTCATCTGAGAAATGGGAAGGCTGGGTCTGGGTGAGGCACTTC
TGTGG

>hg19\_ct\_UserTrack\_3545\_258 range=chr15:26373508-26374907 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_7846 range=chr7:104999165-104999564 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

CTAAGAACACAGAGAGAGAGAGAGAGAGAGAAGCAAGAGTGGAGGTGGAGGTGCCTCTTTTCAA CAACCAGTTCTCTGGAAACTAAGAGTGAGAAGCAAGAATGACACCTCAAGCCATTCAAGAGGGAT CCACCCCCTACAATCCAAACACCAGGCCCCACCACCAACACTGGGGTATCAAATTTCAACATGAG GCTTG

>hg19\_ct\_UserTrack\_3545\_7989 range=chr1:68831813-68832012 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_0

>hg19\_ct\_UserTrack\_3545\_6961 range=chr8:101693225-101693824 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

ACTGCACAGGAACATTTAGTCCTAGTTTTGCATAAAGACCCACAATGCACTCATGCACTCTTTGG
CATTCTTTAAATCTTGCCCCATTGTGACGTGGAGACATGGATCTTAAGAAGAAAAAATGGTCTTT
GTTCATCTTAGGTATTTCTTTCAGTGGTACCTAGAGGCCATTGGCAAATATGTTCAAATTATAAA
CCAAA

>hg19\_ct\_UserTrack\_3545\_16446 range=chr1:206079578-206080177 5'pad=0 3'pad=0 strand=+ repeatMasking=none 0

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>hg19 ct UserTrack 3545 10361 range=chr5:166802623-166802822
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
GGAAGTAAACCAGCAACCCTCCAGCACACAAGAAATGAGAAGAGAATTTAAAAATCACATTCTGA
TGATAACACAGCATTCAGGTGTAGTCAGTTGGTCTTATTAGCAAGTAAATTACATTGCAAAAGAG
GCGGCTTGATAAACTATGACCTATACCTAGAAAATGTCCTCTCTCCACAAGTTTCTAGGTCTTTG
TATTG
>hg19 ct UserTrack 3545 2881 range=chr15:61201309-61201508 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
{\tt TAGAGAAATGGTGGCAAAGGAATTCTTGCTGTGGTCCCAGCGGTGAGCATAACAGAGTTACCTCT}
\tt CTCCACCCCAAATATTCAGACTGCAAGGACACTGGCTCCCAAGCTTCGACCTGCTTGGAGTTCCA
\tt TTCCAGGTACTCTGCTGATGTCTCGGCCAGCCTCAGCCAGACTCCCAGCTGAGCTGAGCTGTT
CTGAG
>hg19 ct UserTrack 3545 804 range=chr3:12468401-12469200 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
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{\tt AAGGTCATACCCCAGGCAAGTGAATCAGAATCTCTAGGGATGGGTCCCAGGCATTCGTTTGCTTT}
TTTAGTCTCCCCAGATAATTTTAATATGTAGCCAAAATTGATAATCCCTGCACTAGACCAAGCTC
CGATT
>hg19 ct UserTrack 3545 4134 range=chr11:58826025-58826624 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1
{\tt CATTCCCACAAGATGCAAGTAAAGAAGCACCGCGGACACCGGGGGAGGGTCACAGAGTGACAGGA}
GGACTGGTTGACCAGCTGACTGGCCTCACTTCTGACAAATGCAAATTACCCAGCCACAGTCCAAC
{\tt CAAGGGTATCAAAACAGGATCTCTGCAGATGGAGCTCAGTGTTATGTGTTTTTGGATGCTCGCAAT}
AAGAT
>hg19 ct UserTrack 3545 15835
                              range=chr2:232233357-232233756
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
{\tt ACAGGGTCACACTTTGTTGCCCAAGCTGGAGGGCCCTGGCGTGAACAAAGCTCACTGCAGCCTTG}
ACCTCCCAGGCACAAGTGATCTTCCTGCCTAGCCTCCCAAGTAGCTGGGATTACAGGCACATACC
ACCATGCCCGCTAATTTTTTGTATTTTTAGTAGAGATGGGTTTTCACCATGCCGGCCAGGCTGG
TCGCG
>hg19 ct UserTrack 3545 6801 range=chr9:120106380-120107579 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
GGAGGTGGGAAAGGAGATCTCTCCAGCACAGCATGCCTGAAAAACGATGCCAGAACTACACAGCC
TTCCACAAAAGCACGTGGAGAAAAAAAAACCCATCCCCAAAAGCAGCATTAACAGGAGAATATTA
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GGCAG
>hq19 ct UserTrack 3545 1820 range=chr21:44846573-44847372 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2
GCCGCCGCTGCTGCTCCGGGGCCGCCGCGCTCCAGCCGCGAGCCGCCGCGCTCCGCCGC
ACGCGGCCCCGGCCCGGCCCCGGCCCCCGTAGTCCCCGCCCCTGCCCC
GCCCCGCCGCCGGGGGGGGCCGCCCATTGACGTCGCTTTGACGCCAGAGCGACGCGCGGCCG
AGCGC
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>hg19 ct UserTrack 3545 2158 range=chrX:66783676-66783875 5'pad=0

3'pad=0 strand=+ repeatMasking=none 0

CAAGGAACAGAATGACTCAATGCAAATTATGGGACCTCTTTGAGTTTGGGGCCCCTACATTTAAA
CTAGTAACTCCGTTGCACATATTGGCACCCTTCCCCCAACAAAATTACTGGGCAGGAATTTTCTT
GAATCCTTCCGTGGCCTGGAATGATCTCCCTTCTCATCCTTGTGATCCACACAGCTGGCAAATGG
CAGGC

>hg19\_ct\_UserTrack\_3545\_4904 range=chr8:68880447-68880646 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

 ${\tt TGGAAGCATCTGCCAGCGACTGGGGAGGGGAAAGGTCACTTGAGGACTGTGGAAAATATTCCCTT} \\ {\tt TCTCCTTAGCATCCTGGAACGTCGGCTCTTGACTAAATTGTTAATAGAATCTGGGAGCTCGGATT} \\ {\tt CTGGTGCTGACATTTTTTTCAGGGTTAGTTCTAGAAATGATATTTCTTAAGCAGCCTTTTGCGGAGCTTC} \\ {\tt GCTTC} \\ \\$ 

>hg19\_ct\_UserTrack\_3545\_17094 range=chr1:214327578-214328577
5'pad=0 3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_6087 range=chr11:73250153-73251552 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_2515 range=chr8:29374882-29375281 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

 ${\tt TCCTTTGCAAAAACTCTCCCAGAAGAGTTACAAACCTCTGCAACTAAGTGAATTGGATATCTTGA} \\ {\tt TTAGACTTGTTCCTTTTTCTTTGACAGGGCAAAATCCCTCTCTGAGGAAGAAGGGAGGAGCCTGC} \\ {\tt ATTGATTAACATATTGCCATTCCTGAATGAATTTACATTCATGAATTATAATATTGGACCATTCC} \\ {\tt TCTGA} \\ \\ {\tt TCTGA$ 

>hg19\_ct\_UserTrack\_3545\_438 range=chr22:21057401-21057800 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_3792 range=chr5:72989645-72989844 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

CCTTTTCCTATCCTCTGAATGGCCTTGCTTTTATCTCTTTGCCTTGTCTCCTGTTTTCCTTCT
GAGGGGGCAAACAAATTCCAAAGCAGCAGTTCTAGCCATAGAGCAAAGAGAGGACCATGGTAACT
GTTTTACCCAGCCTGGCCAGCAGCCACGAGATGTCAGTTCCTGGGAAGTCTGAAGCTCCTTAGCT
GCTGC

 ${\tt TACAGCAAGCATAGGAAACTAATATACTGGGTTCAGTTCTAGGAAACAGAGAGGGTAGCAGAAAG}$   ${\tt CACAG}$ 

>hg19\_ct\_UserTrack\_3545\_5006 range=chr14:91827848-91828447 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_2

GAGCCTGTCCGTCACACAGCTCCCTCCCAGCCTCAAAACTACACTCCAGGCTGGGTGCAGAGGCT
CACGCCTGCAATCCTAGCACTCTGGGAGGCCAAGGTGGGCGGATCACCTGAGGTCAGGGGTTCAA
GACCAGCCTGGCCAACATGGTGAAATCCTGTCTCTACTAAAAATACAAAAATTAGCCAGGCCTGG
TGACG

>hg19\_ct\_UserTrack\_3545\_4014 range=chr12:52195934-52196133 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_1105 range=chr11:10714825-10715224 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

GTTCCCTCCGCTTCCCAGCCGAAGAGGCAGGTTATTCTAGGATATAGGGGAGGCTTACCTAAAAC
TGAGTTATTCTCCTTTCCTCTCTGGCCAGCCTCTCTTCACTCTGGGGAGCTTTTACCATTTAAG
GTCAATGTTACATCTGGCTCCGGAGCTCAGAGCCGAGAAGCCTCTGGCTGCAGAACCTCGGCCGC
ACGCC

>hg19\_ct\_UserTrack\_3545\_6560 range=chr11:77851953-77852152 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_3072 range=chr14:68809048-68810247 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_104 range=chr2:314201-314400 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

CCGCAGGGAAAGCGGTGAAGCGGGCAGGCGAGCTGGAGCACCTGTGTGGCATCATCAGCTCCAG CCTGAAGTTGGTCTTGTGGTGGTGTTTTTCGTTGCTGCCTTCATCTGATAGCCCTGAAGAAAGTGG CGGCCTCTGGGAGGCGAACGGGGAGGCCTCAGTGGCCAGGGGCTCGGCTTTGTGACCCATGCAGG AGATA

>hg19\_ct\_UserTrack\_3545\_3772 range=chr18:51912403-51912802 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

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>hg19 ct UserTrack 3545 5330 range=chr13:107332600-107333199
5'pad=0 3'pad=0 strand=+ repeatMasking=none 1
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AGAGAATGCTATGTGACTAGTAAATCATACAATTGAGGAATTGCATTTAAAAATTAGAGTTATCA
GGAACACCTAAAAAGCTGTCTATTCAAGTAAGCCCCTGGAGCTTTGATAATTATCAGGAGGCAGA
ATGTA
>hg19 ct UserTrack 3545 3927 range=chr2:47982497-47983496 5'pad=0
3'pad=0 strand=+ repeatMasking=none 4
{\tt AACTTGTGAGAATCAAAGAGCTGCAGTATTGTGGTGGGATTATAGGCAGGGAGGCTGATGTTCTG}
\tt CGGCAGGAGTAGGTAGGTAGATTGCTCCAAGGATCTTCACTTTGCTTTACCTGCTTCCAAC
GACAC
>hg19 ct UserTrack 3545 11710
                                 range=chr2:170932155-170933754
5'pad=0 3'pad=0 strand=+ repeatMasking=none 0
\tt CCCTTGTGTCCCTGCTCCACTCTTGTGTTCCTAACCCTGATCCTGACCCTAGGTCAACCAGATTC
{\tt TCTTTCTCAGGAATGTTAAATCTGTATAGCGAGACTTAGCAGGGGTAAATGGTGACAGGAGCTGTA}
TAGTCCAACAGTACTACCCTTGAAAAACTGTCTGTGAATTACTACTTCTGAATTTTTTTATCAGT
TAAGA
>hg19 ct UserTrack 3545 1424 range=chr3:18384997-18385596 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1
\tt CTGAAGCTTTTAATTCTTTAATCCACCATGGAATGTTGCTTAATTACATATTTTATTATGCATAA
\tt CTGAAAATTATGTACTTTAGTTTCAACAATGATATGAAAGCATGTATTGTTTATAAATAGAGACT
GGTTTGTCTCTTTTTTTATATTACAAATATTTGTGGAATTCTCACATGTTCTCCTTCTAAAACTT
GGCTT
>hg19 ct UserTrack 3545 12013 range=chr3:169777107-169777706
5'pad=0 3'pad=0 strand=+ repeatMasking=none 2
{\tt GATGGGGAGGTTTGTTACACAGGGAAACGGGTGCCATGGTGGTTTGCTGTACAGATTATCCCATC}
{\tt ACCTAGGCATTAGCCCAGCATCCATTAGCTGTTTTTCCTGATGCTTTTCTTCCCCCCACTCCCC}
\verb|CCTCTAGCAGGCCCAAGTGTGTGTGTTTCCCACCATGTGTCCACGTGGGAACCAGATTCTTGCT| \\
GTGGG
>hg19 ct UserTrack 3545 1361 range=chr10:16401995-16402794 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
AGCAAAACAGATCAAATTACACATTTCAAAACATTAGCTCTGTACACTATAATCTTATGTGGGGT
GTCAG
>hq19 ct UserTrack 3545 5147 range=chr11:66579425-66579824 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0
TGGGGAGAGAGAAAACACTTTTTAAAATGTAAAAAACAATTTCTAATCCAAAAATAGAAAAGA
GGAAAAAGGAAACAAAGAATACAAGCAAGAAATGGAAAAAAGATGATGGATTTAAACTCCACTAT
AGCTATCTTCATATTACAAGTAAATGATTTAAACAACCCAATTATAAGACAACTGCACATCTTGG
CTCCT
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>hg19 ct UserTrack 3545 324 range=chr14:23648161-23648960 5'pad=0

3'pad=0 strand=+ repeatMasking=none 3

 $\label{thm:coagcact} {\tt GTAATCCCAGCACTGATAGGCCGAGGTGGGAGGATTTCTTGAGCCCAGGAGTTGGAGACCAGCCT} \\ {\tt GGGCGATACAGTGAGACCCTGTTTCTACAAGAAAAATTTAAAATAGCTAGGTGTCGTGGTGTAT} \\ {\tt GCCTGTGGTCACAGCTACTGAGGAAGCTGAGGTGGAAGGATCGCTTGAGCCCAGGAGTTTGAGGC} \\ {\tt TGCAG} \\ {\tt TGCAG} \\ \\ {\tt TGCAG} \\ \\ {\tt TGCAG} \\ {\tt T$ 

>hg19\_ct\_UserTrack\_3545\_181 range=chr3:3122201-3122600 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_199 range=chr17:1393251-1393650 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_5022 range=chr9:97742380-97743179 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_6986 range=chr12:97645870-97646069 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

ATGATGGTGACAGGGTCTCTGCTGTCATTCTCATTTTATTGAGTTGACAGTGTGAAAAGATAATA
AATCTTGAGACCCCCAAATCACTAAGCTAAAGGGAAAAGTCAAGCTGAGAACTGCTTAGGGCAAA
CTTCCATTCTATTCAGTCATCGCTCTGCTCATTGAGATAAATGCATATGTGACTGCTTCCTTTGG
AAAGG

>hg19\_ct\_UserTrack\_3545\_1526 range=chr20:20421201-20422000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

>hg19\_ct\_UserTrack\_3545\_16441 range=chr2:237568062-237569861
5'pad=0 3'pad=0 strand=+ repeatMasking=none 6

GTGACCCTAATGTTTCAAGTCAAGCTACAAAGCTACCTTATTTTTGTTCTTACTGTCACTAAAGA
TACATCTAAAATTATAAAATAATTTCATGACAGTAGGTAAAGTAGAATCAGTTATTTTTGGGAGAC
ATTATCAATATTCAGCTGCAATAAAAAATTAATGGGTAAAAGCAATTCTGATGTATAATAAAGAT

>hg19\_ct\_UserTrack\_3545\_11721 range=chr3:162438307-162439306
5'pad=0 3'pad=0 strand=+ repeatMasking=none 4

AGTTTCCTGACCAAATGTTGTTCAAGAGAAAAGCTAGAAATCAGATACTGAGGTCACAAATGTTT TCAGCATTTCTAACTGTATATTTGATGTCCTATAACCTAGACCACACATTTTTAACTGCTAAAAC TTAGGCAATTTTTATTACGGGATAATACTGACAGGATAAAAAGCAGTTTGAACAGCAAGCTGTCA
TTAGC

>hg19\_ct\_UserTrack\_3545\_4858 range=chr15:75929146-75930545 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

TTTATTTACTTATTTACTCTGTCGCCCAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACT GCAACCTCTGCCTCCCAGGTTCAAGCTATTCTTCTGCCTCAGCCTCAGCTTTGCAAACCTAGCCC AAGTAGCTGGGTTTACAAACATGTGCCATCACGCCCGACTAATTTTTATATTTTTTGCTAGAGATG GGGTT

## (3) 200 non-enhancers

>hg19\_ct\_UserTrack\_3545\_158 range=chr12:78319870-78393869 5'pad=0
3'pad=0 strand=+ repeatMasking=none 323

>hg19\_ct\_UserTrack\_3545\_57 range=chr7:10106276-10452075 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1151

ACTGGTTATCTTTTAGGACTAGTTAATATAACCCATTCTCTAACCAACAGATAACTCAACCAGGT TCAGCACCTGATGGGTTACTCTTCAAGGACTCCCTTCTAAATCTCACTTTGCTGTGTCCACAATT CTAAATTGCTATACAATAGCATTTTCTCACTCTCATTCAGTATTTTACACAGAAAGATATGCCTT GAACC

>hg19\_ct\_UserTrack\_3545\_762 range=chr2:59404297-59409096 5'pad=0
3'pad=0 strand=+ repeatMasking=none 15

ATGCATATGTTCTTCAGTAAACAGAGCAGCCACTGGTACCACAGGACAGCCAGTGCTGAGGAGGA GAGGGTGAGAGGGGACTCTGCAGGAGGAAAGAACAGGGCTCAGCAGCAAGAGCTGAGAAAAAAGGA TGAGGGAAGCTAAGACCTTGAAAGAAAGCAGCGCTGGGCTCTGCTCCAAGCCTAAATTTATGAAA ACATT

>hg19\_ct\_UserTrack\_3545\_78 range=chr11:21614425-21696024 5'pad=0
3'pad=0 strand=+ repeatMasking=none 133

 $\tt CTGCTCTCGCTCTATAAAAGTCAGAGTGCCTAAGCTGTTAATTTGCAAACCCCTTCTTAATC\\ TACCCTCTATTCATAGTTTATATCCAGAACTATGGTTTAATATAATCGTAAGGCCATTGACTTTT\\ GAATACGTAGCTCCAGTCTTAGTCTCACTGGACTAGGTCCTATATCTAACCACTACCACAAAGTC\\ TCCTA\\ \\$ 

>hg19\_ct\_UserTrack\_3545\_9 range=chr17:51184002-51429801 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_60

GCTTGGGTATATATTGTCCAATATAGCAGGCCTCATGTGCTCCTTAAACCAGGGCTACTTCAAAT
AGAGTTGCCCTTTACAGTTGGATAATGGTTAACTTTAAATAGCAAGATGTATCTAGCAAGAGGGT
TTCTGAAAACCCCTGGGTTTCTTTCTTATATTGTCCTCTATTTTCCTAAATTTCATTTTTAACTT
ACTTT

>hg19\_ct\_UserTrack\_3545\_997 range=chr2:95475274-95522073 5'pad=0
3'pad=0 strand=+ repeatMasking=none 60

 ${\tt TTTAAAGAAAGTCGTGAATATACAGACAGATTATTCCCTTTATCACAATTCTTACCCAGTTCTGG}\\ {\tt TTCTT}$ 

>hg19\_ct\_UserTrack\_3545\_6 range=chr13:49222200-49305199 5'pad=0
3'pad=0 strand=+ repeatMasking=none 159

TGCCAATTTACCAGAAGGGTTTCCAATGTGGGAGTTACAGGTGGCAGAGACAGTGGGCAAATAGT
ATACTCAGAAGGTCACTGAGTAGCAACTAGGGAGGCTTCCGCATGGCAGGTCTACCAGTTTTCCC
CCTCTGTCTCAGGACTGCTCTACACAGAAGCCTACCATTATTTCCTTGTAAAGATGATGCAAAGT
GCACC

>hg19\_ct\_UserTrack\_3545\_419 range=chrX:113089936-113172135 5'pad=0
3'pad=0 strand=+ repeatMasking=none 410

>hg19\_ct\_UserTrack\_3545\_270 range=chr4:96916178-97273377 5'pad=0
3'pad=0 strand=+ repeatMasking=none 941

CCTAGGGAATAGAAAGGAGCACTTTCTGTCTTGGCAAAGCTACACTGGTTGTAACAGTGGTTCTC
AAACCCAAGATTATTAAAATGTAAGTTCTGATTCAGTAGTTCTGGGGCAAGGCCCAAGCTTCTGC
ATTTGTAAGAAGGCCCCAAATAATGTACATGTCGTTGCCCACATACCATACTTTTAAGACAAGAA
GTTAG

>hg19\_ct\_UserTrack\_3545\_165 range=chr5:63555645-63680644 5'pad=0
3'pad=0 strand=+ repeatMasking=none 476

GGATGTCCACTTTAACCACTGCTATTCAACATTGTGCTGGAAACTCTAGCTGGAACAATTTGATT
TAAAAATAAATAAATAAATAAAAGGCATCCAAATTGGAAAAGAAGTAGTAAAACTATCTGTATTC
TGATGTCCTAATCCTGTATACAGAAAATCCCAAAGAATTCAGAAGAAAGCTACTAGAGCTAATTA
ATTTA

>hg19\_ct\_UserTrack\_3545\_667 range=chr7:34174276-34205675 5'pad=0
3'pad=0 strand=+ repeatMasking=none 52

>hg19\_ct\_UserTrack\_3545\_54 range=chr13:31810801-31876600 5'pad=0
3'pad=0 strand=+ repeatMasking=none 278

>hg19\_ct\_UserTrack\_3545\_788 range=chrX:24524680-24558879 5'pad=0
3'pad=0 strand=+ repeatMasking=none 142

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>hg19\_ct\_UserTrack\_3545\_61 range=chr1:251538-267537 5'pad=0 3'pad=0
strand=+ repeatMasking=none 34

>hg19\_ct\_UserTrack\_3545\_1210 range=chr12:110663018-110683217 5'pad=0 3'pad=0 strand=+ repeatMasking=none 33

>hg19\_ct\_UserTrack\_3545\_1825 range=chr1:198655578-198668377 5'pad=0
3'pad=0 strand=+ repeatMasking=none 25

>hg19\_ct\_UserTrack\_3545\_321 range=chr9:5818601-5832000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 43

>hg19\_ct\_UserTrack\_3545\_248 range=chr2:135763731-135800930 5'pad=0 3'pad=0 strand=+ repeatMasking=none 16

>hg19\_ct\_UserTrack\_3545\_435 range=chr4:176458407-176691406 5'pad=0
3'pad=0 strand=+ repeatMasking=none 441

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AAATATTAGAACTCTTTTTATAATTGGTCTTTAATAAATTATCACTGCATTTTAGAAGCAAACTT
ACTTCAATGCTGTGGTCATGTAACTCTTTTAATTGATAACTAGTTTAATAAACATTTATTGCTTG
CTATG

>hg19\_ct\_UserTrack\_3545\_292 range=chr5:147101408-147202207 5'pad=0
3'pad=0 strand=+ repeatMasking=none 170

>hg19\_ct\_UserTrack\_3545\_770 range=chr8:48146853-48172047 5'pad=0
3'pad=0 strand=+ repeatMasking=none 61

>hg19\_ct\_UserTrack\_3545\_1451 range=chr1:153240977-153250376 5'pad=0
3'pad=0 strand=+ repeatMasking=none 10

>hg19\_ct\_UserTrack\_3545\_121 range=chr10:56851795-57019594 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

TGAGAAGAAACAAATTAATGACAAACAGACTAGAATGCACCAATAAAAACTTACACCAAGAACT
GTTTTAGAAAACATGCTTATTGCTCTGTTTGTTTCTATTCTCTTTGTCTCATATTGTATTTCAAT
TTTGAAAGTAAGTTATGTAATATAAATAAGTTGATCAATTAACAAAATACATAATCTAGACTCA
CATAT

>hg19\_ct\_UserTrack\_3545\_612 range=chr6:30182622-30186821 5'pad=0
3'pad=0 strand=+ repeatMasking=none 14

>hg19\_ct\_UserTrack\_3545\_55 range=chr6:2750602-2761201 5'pad=0
3'pad=0 strand=+ repeatMasking=none 44

TGCTGTGGCACAATTATAGCTCACTGTGGCCTTGAATTCCTGGCCTCAAGTGATCCTCTCGAGTA
GTGAGGACCACTGGTGCACAATACCACGCCAAGCTAATTGTTTAAAAAATTTTTTGTAGAGATGGA
GGTCTCACTTTTTTGCCCAGGTTGGTCTTGAACTCCTGGGTTCAAGTGATCCTCCTGCCTTGGCC
TCGCA

>hg19\_ct\_UserTrack\_3545\_54 range=chr14:42080651-42293650 5'pad=0
3'pad=0 strand=+ repeatMasking=none 995

GCTTATCATCCATAGTAAAATCAGAATTACCCTCAATATGACAGCCAAGGTATTGTTGACTGTCT
CATTTTCCTATCAGATCCAGATAAAATAGGAGAATAGTTTTTCATTGACTTACGCAATATTTACA
TGGCCATTAAAAAGAAAGATACAGGTTAAAATTATTTTCCTAAATTCTGAGGTAGAGTGAAAATG
AAATA

>hg19\_ct\_UserTrack\_3545\_75 range=chr17:63290739-63354738 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_376 range=chr4:149516351-149746750 5'pad=0
3'pad=0 strand=+ repeatMasking=none 106

AAACAGTAATCATACCTGAAGAAATTAAAATAGAGCCACATAGCAAAATGTGACCTAAATGCAGT ACATAAGCCAAAAACATAAATTCATAACTAGATAAATCAATGGATAGACTTTATGCTACCAGCAA

>hg19\_ct\_UserTrack\_3545\_138 range=chr13:86526400-86760199 5'pad=0
3'pad=0 strand=+ repeatMasking=none 492

>hg19\_ct\_UserTrack\_3545\_1548 range=chr1:160847577-160854376 5'pad=0
3'pad=0 strand=+ repeatMasking=none 9

>hg19\_ct\_UserTrack\_3545\_143 range=chr8:43392244-43759643 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1590

AGAATCTGTGAAGGAACATTTGTAAGCCCATTGAGTTTGATAGAGAAAAACGGATTACCAACATA TAAAAACTTAAAAGAAACTATCTGTGAAACTGCTTTGTGATGTGTGGATTCATCTCACAGAGTTA AGCCTTTCTTTTCACTCTGCAGGTTGGAAACACTCCTTTTCCAGACTCTACTAAGGGATATTTGG GAGTT

>hg19\_ct\_UserTrack\_3545\_101 range=chrX:4500201-5186400 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1231

>hg19\_ct\_UserTrack\_3545\_310 range=chr5:154640808-154832207 5'pad=0
3'pad=0 strand=+ repeatMasking=none 453

CAATAAGAAACAAGCAATAAGAAACCATATTGGCCATGTGGATAACTTCTTTGGTAAGGTGTCT
TTTAAGGATAAAGATCTTAAAAGGATAAAGGATAAAGACCTTTTAAGGATAAAGACCTTAAAAGA
CACCTTGCCAAAGAAGTTATCCACATGGCAAATAAACATATTAATAAATGCTCCAAATAATGTGT
TATAA

>hg19\_ct\_UserTrack\_3545\_187 range=chr1:104092478-104271877 5'pad=0
3'pad=0 strand=+ repeatMasking=none 107

>hg19\_ct\_UserTrack\_3545\_98 range=chr13:69502000-69861199 5'pad=0
3'pad=0 strand=+ repeatMasking=none 395

>hg19\_ct\_UserTrack\_3545\_232 range=chr7:125237165-125310964 5'pad=0
3'pad=0 strand=+ repeatMasking=none 195

AAATACAAAAGACTGAAGTTTATTTATATAAAATTCTGGAAGATGAAAAATCTAGTGACAGAAAA
TTATTGGTTGCCTTAAGATGAAAGTCAGGAGAGAGAATCCACTGCAAAGGACCGAAGGAAACTTT
TTCAGGTAAGAAATTAATTTGATATCTTACTTGGCTTTACACAATTACTAAAATCAAATTTCAAA
CTTAA

>hg19\_ct\_UserTrack\_3545\_11 range=chr8:13585630-13777229 5'pad=0
3'pad=0 strand=+ repeatMasking=none 747

>hg19\_ct\_UserTrack\_3545\_1209 range=chr9:128891580-128906979 5'pad=0
3'pad=0 strand=+ repeatMasking=none 5

>hg19\_ct\_UserTrack\_3545\_130 range=chr1:71151413-71210812 5'pad=0
3'pad=0 strand=+ repeatMasking=none 292

>hg19\_ct\_UserTrack\_3545\_388 range=chr4:157598751-157812350 5'pad=0
3'pad=0 strand=+ repeatMasking=none 919

>hg19\_ct\_UserTrack\_3545\_333 range=chr1:238402378-238546577 5'pad=0
3'pad=0 strand=+ repeatMasking=none 275

>hg19\_ct\_UserTrack\_3545\_264 range=chr7:144206668-144382667 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_749

>hg19\_ct\_UserTrack\_3545\_1010 range=chr11:83382753-83392152 5'pad=0
3'pad=0 strand=+ repeatMasking=none 19

>hg19\_ct\_UserTrack\_3545\_231 range=chr9:119906980-120009579 5'pad=0
3'pad=0 strand=+ repeatMasking=none 15

AGTTAAGTATTAATAATTTCTGTTCAGAGATGAGGATAGCAAGACTCAGAAATGTTACATGGTTT
TTCCAGGTCATGCAGCTTAGGGACGATAGAACTGGGATTTTGGACTCAGGTTATGGTGACTCCAAT
GCTCTGGCCTTATCTGTTGCTGCACTCTATAAGTACTCCCTCTCTGGTTGGCTGGAGATGGGTAT

>hg19\_ct\_UserTrack\_3545\_280 range=chr7:152557268-152591267 5'pad=0
3'pad=0 strand=+ repeatMasking=none 146

>hg19\_ct\_UserTrack\_3545\_541 range=chr13:70099200-70111599 5'pad=0
3'pad=0 strand=+ repeatMasking=none 27

>hg19\_ct\_UserTrack\_3545\_92 range=chr11:29454625-29641824 5'pad=0
3'pad=0 strand=+ repeatMasking=none 659

ACAATGCTTAGAGTTCAAATAATCTAGATTGATAAGCATTTTCATCTAAAATGCTCCTTGAC AATCACATGTATGTTACAAATAGCTTTTATTTTTTAAAACAACATGGGCTTAGAAGTCAGGAAAA TTTAAATACATGTTTATTTTCTTTGTATTATACAAGTATGTGTATGTGTGGGCACATACACACAA ACACA

>hg19\_ct\_UserTrack\_3545\_106 range=chr8:24435111-24542910 5'pad=0
3'pad=0 strand=+ repeatMasking=none 274

AAATCTGGTTGTGTCTTTATGTCACACTCAGCGCCTCTTCTCCTCCTCACTCCCTGCTTGAGAAC
TTCTGTTTTTATCCAGGTGTCTCAAGCAAGTTTTGGAAATTCAGTATTCCTTCAACCACTGATTA
GTGATGGGACCTTATGAAATGTCAAAGAGCATTTATTTTTGTGAAAGTAAGAATAACAATAAAGAG
TAGTA

>hg19\_ct\_UserTrack\_3545\_1512 range=chr4:127513551-127525350 5'pad=0
3'pad=0 strand=+ repeatMasking=none 27

>hg19\_ct\_UserTrack\_3545\_1202 range=chr10:100551011-100612410 5'pad=0 3'pad=0 strand=+ repeatMasking=none 241

 ${\tt TACACAGGTCAAGTGACCAAGCCTGATTCATTTTTATATTCCTCACAGGAACACAGTGCTAGGTG}\\ {\tt TTCAA}$ 

>hg19\_ct\_UserTrack\_3545\_63 range=chr17:51430002-51594001 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_659

>hg19\_ct\_UserTrack\_3545\_213 range=chr7:118015365-118343564 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1557

>hg19\_ct\_UserTrack\_3545\_1268 range=chr8:114184425-114214424 5'pad=0
3'pad=0 strand=+ repeatMasking=none 51

>hg19\_ct\_UserTrack\_3545\_1451 range=chrX:101860545-101905944 5'pad=0
3'pad=0 strand=+ repeatMasking=none 225

>hg19\_ct\_UserTrack\_3545\_273 range=chr13:29395601-29484800 5'pad=0
3'pad=0 strand=+ repeatMasking=none 25

>hg19\_ct\_UserTrack\_3545\_235 range=chr9:120932780-121147779 5'pad=0
3'pad=0 strand=+ repeatMasking=none 873

>hg19\_ct\_UserTrack\_3545\_233 range=chr7:125342365-125764764 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1248

CTGTGGAACCATGAATTAAACCTCGTTTCTTCATAAATTACCCAGTCTCTCAGGTAGTCTTCATA
AATTACCCAGTCTCAGGTAGTTCTTTGTAGCAGTGTAAGAACAGACGAATACAACTACTTAATAG
ATTCTTGATCTTAGGTAACTTACAACTTATTTAAATTTCAGTGTTCTTGTATTATATGTAAGCTA
TAATA

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>hg19_ct_UserTrack_3545_221 range=chr5:101313902-101559501 5'pad=0
3'pad=0 strand=+ repeatMasking=none 30
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>hg19\_ct\_UserTrack\_3545\_383 range=chr4:156363951-156395750 5'pad=0
3'pad=0 strand=+ repeatMasking=none 15

AATATAAATAATCCTTATTGCCATTTTAAGTATATTCTAAATTTTTCTTTTTTGATCTCCTGCAAA
CCTAAACAGTATATTATAGATGTCCAAAAATGTATTTTATTTGCAAACACTTTTTATAACTTGGGA
ACTTTTTTCTGAGATAAACCTCTGAAATTTTTAATTTTTAATAGTAAATATGATTTGATGTGT
TTGCT

>hg19\_ct\_UserTrack\_3545\_100 range=chrX:3881201-4181000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 882

GGTAAAAATTGGGATGTTAGCATTGTCTTTCTGGAGACTTTGGTGGGCTGGAGTCTTTGCTTAGT GATGGCTGTTGAGGTTGCTTCATTAGGGGTAGGTTAATTTGGTAATGAGCATTCAAAGACCCCAA AAAGACACCCTACTCCCCTGTCAGAGCATGCAGGAACCAAGAGGACTGCAAACTTAATGACATGG GCATG

>hg19\_ct\_UserTrack\_3545\_64 range=chr18:29080803-29133802 5'pad=0
3'pad=0 strand=+ repeatMasking=none 112

>hg19\_ct\_UserTrack\_3545\_1098 range=chr7:81630065-81646664 5'pad=0
3'pad=0 strand=+ repeatMasking=none 25

>hg19\_ct\_UserTrack\_3545\_102 range=chr4:19226903-19415302 5'pad=0
3'pad=0 strand=+ repeatMasking=none 759

>hg19\_ct\_UserTrack\_3545\_274 range=chr3:139847711-139935110 5'pad=0
3'pad=0 strand=+ repeatMasking=none 360

>hg19\_ct\_UserTrack\_3545\_73 range=chr16:33141100-33205499 5'pad=0
3'pad=0 strand=+ repeatMasking=none 209

>hg19\_ct\_UserTrack\_3545\_1587 range=chr2:172366755-172372354 5'pad=0
3'pad=0 strand=+ repeatMasking=none 24

>hg19\_ct\_UserTrack\_3545\_583 range=chr7:26721876-26725875 5'pad=0
3'pad=0 strand=+ repeatMasking=none 4

GAGTATAATAGCTATATGCCACTCACTCCTATAATCTGAACTTGCAAGTGAAATCTAATCAACGT
TTTAGTTTTATACACAATTGCAGCTAAATTGGTTTTAAAAAAGACTGTGAGCTATATAAATTTAGG
AATGATTCCAAGAAAGTTTCTTGACAGGAGCTGAAACTAATCAGTTTGATTTCTTTATTAAGTAG
TTAAC

>hg19\_ct\_UserTrack\_3545\_10 range=chr16:25850500-26383699 5'pad=0
3'pad=0 strand=+ repeatMasking=none 598

ACGGAGCTTCTCCTCATGGCTGTTTGGCTCCTCACAGCATGCTGGTTTCAGGGTCATCAGAAG
TCTTACAAGGTGGCCGACTTCCCTCAAGGCACAAAAGCAGATGGTGCCAAGCCTTCAAAATGTGT
GATCACTGACATCCCAGAATGTCACGTTCACCACATTGTATCGTAACCATAATAAGTTCATTGCA
CAATG

>hg19\_ct\_UserTrack\_3545\_519 range=chr10:38946395-39047594 5'pad=0
3'pad=0 strand=+ repeatMasking=none 98

ATCCTGTGTAGAAATGCCTTTGGTGCTCCTGCCAGAATCCATTTACCAGGTCAATGAACACATCT
CCCAGTGCTTCTTGTTGGCTGCTATTACCTGCAGGTTTCTAGAACCCTTGTCCTGCTGACAAGCA
CCTACTTGGGAATACTAGGGAGGTTGTGCACCCCTCTATTTTCCCTCCAGACAGCATCTGCCAAT
GACGG

>hg19\_ct\_UserTrack\_3545\_109 range=chr6:50160842-50226841 5'pad=0
3'pad=0 strand=+ repeatMasking=none 170

 $\tt CCTGCCTTTTTTTTGTTCTCCATTTGCTTGGTAGATCTTCCTCCATCCCTTTATTTTGAGCCTACA\\ TGTGTCTCTGCACATGAGATGGGTTTCCTGAATACAGCACACTGATGGGTCTTGAATCTTTATCC\\ AATTTGCGAGTCTGTGTCTTTTAATTGGAGCATTTAGCCCATTTACATTTAAAGTTAATATTGTT\\ ATGTG\\$ 

>hg19\_ct\_UserTrack\_3545\_148 range=chr21:26743530-26758129 5'pad=0
3'pad=0 strand=+ repeatMasking=none 33

>hg19\_ct\_UserTrack\_3545\_71 range=chr10:26047195-26164394 5'pad=0
3'pad=0 strand=+ repeatMasking=none 336

 ${\tt GGTCTAACTTTTTTCTCAAATGAAATGATCATTTGTTTCAGCACACTTTATTAAATAATGGTTT} \\ {\tt ATTTT}$ 

>hg19\_ct\_UserTrack\_3545\_1536 range=chr2:165336355-165352154 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2

>hg19\_ct\_UserTrack\_3545\_9 range=chr13:54983200-56951599 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2890

>hg19\_ct\_UserTrack\_3545\_1177 range=chr6:117602508-117638507 5'pad=0
3'pad=0 strand=+ repeatMasking=none 107

 ${\tt TGGACAAGTCATTCTACCTTCTTGACAATGCTGGGTCTCCCATGTCAAAGTGAGGGTCCTCCACT} \\ {\tt CAATGATCTCTTTGTAATTCTCCCAAACTAGGGGTGACTGAGCAGTTGGCTTTGGTGGTACCCAT} \\ {\tt CTCTTCTAATTGAAGCCTACAGAGGAGGTTTCCAAACCCAGATATCCAGTATCTTCACCCTCCCG} \\ {\tt CCTCT} \\ {\tt CCTCTCT} \\ {\tt CCTCT} \\ {\tt CCTCTCT} \\ {\tt CCTCT} \\ {\tt CCTCTCT} \\ {\tt CCTCT} \\ {\tt CCTCT} \\ {\tt CCTCT} \\ {\tt CCTCT} \\ {\tt CCTCT}$ 

>hg19\_ct\_UserTrack\_3545\_405 range=chrX:108116545-108297144 5'pad=0
3'pad=0 strand=+ repeatMasking=none 11

>hg19\_ct\_UserTrack\_3545\_44 range=chr12:7708734-7741333 5'pad=0
3'pad=0 strand=+ repeatMasking=none 89

>hg19\_ct\_UserTrack\_3545\_900 range=chr14:107173356-107183155 5'pad=0
3'pad=0 strand=+ repeatMasking=none 19

TATCTGTTTCATTTTGCATTCCTGTTAGCAATGTTTTAGCCTCTAGCAACCTGGTATGCTCACCA
GCATTGATGTTATCTGTATTTCTTCTTAATTTCAGCCATTTTAAAAAGTGTACAGTGGTGTCTCT
TTGCGGGCTTGATTTGAATTTCTCTAACGGAAAATCCTGTTGAGATCCTGTTTATATGCTTCAGT
GTCAT

>hg19\_ct\_UserTrack\_3545\_772 range=chr9:75815981-75884380 5'pad=0
3'pad=0 strand=+ repeatMasking=none 153

>hg19\_ct\_UserTrack\_3545\_2168 range=chr2:239748454-239750253 5'pad=0
3'pad=0 strand=+ repeatMasking=none 7

>hg19\_ct\_UserTrack\_3545\_208 range=chr6:103098308-103297707 5'pad=0
3'pad=0 strand=+ repeatMasking=none 479

TGATGTGAATTCCTAAGATGTATTCTTTTTTAAAAATGTGAAGATAATTGAAACATACAAGGAAT GTAGGCACAATGAAACAAAGCTATTTAAAAATTAACCTAGAACCTACAATCAAAAAAGCAAAACAA AGCAAAACCAAAACCAAAAAAGCCATTGCTCTAGTGGTTGCTGTGGTGTCCTGTCAGGAATCTCCC TTCAG

>hg19\_ct\_UserTrack\_3545\_95 range=chr16:60011300-60193699 5'pad=0
3'pad=0 strand=+ repeatMasking=none 336

>hg19\_ct\_UserTrack\_3545\_53 range=chr2:185476556-185694555 5'pad=0
3'pad=0 strand=+ repeatMasking=none 624

>hg19\_ct\_UserTrack\_3545\_1569 range=chr7:138134661-138144260 5'pad=0 3'pad=0 strand=+ repeatMasking=none 19

>hg19\_ct\_UserTrack\_3545\_296 range=chr18:18775603-18818002 5'pad=0
3'pad=0 strand=+ repeatMasking=none 58

>hg19\_ct\_UserTrack\_3545\_225 range=chr20:17103401-17165400 5'pad=0
3'pad=0 strand=+ repeatMasking=none 232

>hg19\_ct\_UserTrack\_3545\_680 range=chr7:35230276-35248275 5'pad=0
3'pad=0 strand=+ repeatMasking=none 75

TCATAGTAAATTTGGTGTTGTAGAAAGCTTATATACCCACATAGATGAAGGCATTTTATAATATA
TAGTATGACTATGACTATGAGGACTTAAGGATATGCCTAAAAGGAAAATTAACTCTGCAACTATT
TAAGTTACATCTCTATTCTCAAATTATTTTAGAGTAAGAATAAAGTACCACCTCTTATAGTCAAA
ATAAT

>hg19\_ct\_UserTrack\_3545\_1724 range=chrX:130812120-130902719 5'pad=0
3'pad=0 strand=+ repeatMasking=none 287

AGACTTTATGGGCTGTGTGTGTGTTTTTGTGTGTGTCTCTGAGAGTTTTATAATGTCTTTTAG
GTATAAGAATTAACTAGTAAATTAAAGAATAATGCTTGACAAAGATTAAGAAAAATCCATGTATT
AATAATGAAGAAAACCACTACCATACAACTAGTCAAGGCAACTTAAGAACTTTTGGATTATTTCC
AGGAA

>hg19\_ct\_UserTrack\_3545\_1080 range=chr9:111524580-111535979 5'pad=0
3'pad=0 strand=+ repeatMasking=none 12

TATAATACATATAACATACAAAATATGTGCTGACGGTTTATACTGCCAGGAAGGCTTCCAGTCAA
CAGTAGGCTACTGGCAGTTAAATTTGGGGAGAGTCAAAAGTTGTACATGGATTTTCGACTACACG
GGAGACAGCACCCCCTAAATCCCATGTGTTCAAGGATCAACTGTAATACCTTTATGCCACTCTAG
ATCTG

>hg19\_ct\_UserTrack\_3545\_1849 range=chr2:202423756-202483755 5'pad=0
3'pad=0 strand=+ repeatMasking=none 89

GAGAGGGGTTACTTAAACATAATTCTATATGATAAGCTGAGTCCCGATAGGACTGAGTACTTCTC
GCATCTCTCAGGGATGGCTGGATCTTTTAAACCACGTTAACCTTTGGTATCCCTGCTCAATATCT
ATAGTCATCTCTGCTGTAATGAGTAGGTCCACAATTTTCCAGAAACTTTTTGAGTGCCAAAATGA
CACAG

>hg19\_ct\_UserTrack\_3545\_47 range=chrX:87868745-88604944 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2314

ATCCTTTAATATTACATGAAAATCTTGTTCAAGAGAGAAAGCCAAATTTCATCCTTGCATTATTG
TACTATTAATGTCAACCCCAATCTTTAATAAAACCTTATAGGCAAAATCCATCAATCTTAATCAGT
TTGACCATGAGGTGAAATTTTAATAAACTTTTTATAACCCTTTACAAGTTTTTTGTAAAGAGCAGA
TCAGT

>hg19\_ct\_UserTrack\_3545\_16 range=chr16:62795100-63031699 5'pad=0
3'pad=0 strand=+ repeatMasking=none 483

ACATTTATTCATGTGCCTATATTTCATTAATGTCCCTCACCTTCATTAGGGTGTTGCATGTGGAC
AGAAACTGTATCTTTGTTTTTTGTCCCCATTGTATTTCCAGAGCCAAGAAAAGGACCAGGCAAGTA
GTGAGATTTGACTGACAGGTTTAAATAGATGGACAAATAAAGGAAGCATATGATTTTCAACAGAC
GATAA

>hg19\_ct\_UserTrack\_3545\_290 range=chr8:111381825-111667824 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1152

>hg19\_ct\_UserTrack\_3545\_1176 range=chr7:90104865-90121464 5'pad=0
3'pad=0 strand=+ repeatMasking=none 58

 ${\tt TTATTATACTTGGACACCACTTTTATTTTTCTCTTTCCAAATATAGTGTGTTTTGGTGTAGTGAAG}$   ${\tt AAAAA}$ 

>hg19\_ct\_UserTrack\_3545\_8 range=chr10:9973395-10664994 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1139

TGACCCAATTATGAGTAACCAATAGCCCATGATACAGACACAGGATGCTGTGAACATGTGTCCCA GATGGTCGGGCACATGTTCACAGCTATGAATGTATAAATGTATAAAGCTTTGGTTTATACATTTT AGGGGGATTCAAGACATCAACCAACACATGTAAGATGTACTTGGGTTCAGTCTGGAAAGGTGGGA CAATT

>hg19\_ct\_UserTrack\_3545\_2 range=chr7:108829165-109291564 5'pad=0
3'pad=0 strand=+ repeatMasking=none 54

GTCATCAAATAATTTCTTGTGGGAATAGTTTACACAGATATTTCATATAGAAACTATTTGAAACA
AAACCATAACATTTTTATCATATGTAAAGTAACAATAATTCCTTAGTATCATCAAATATGAGTAC
TCATATTCCCCTGAATATCTTGTAACAATTTTGTATAATTTCTTTTAATTTGAATTCAAATAATA
TTTAT

>hg19\_ct\_UserTrack\_3545\_989 range=chr3:90117311-90140710 5'pad=0
3'pad=0 strand=+ repeatMasking=none 46

>hg19\_ct\_UserTrack\_3545\_125 range=chr13:79553000-79630799 5'pad=0
3'pad=0 strand=+ repeatMasking=none 348

AGTGCTAGGATGGTGATACTCACAGGGTTCTGTGGGTGCATATACGACAAATCTTTAGGGAGACG ACACACAGCTGAGACTTAGAAGAGGGAGAGATAAAGGAGGGGAACACTCACCAATGAGTCTGGAG AAGCAGGCGAGCACCACATCATAAAAGGCCTTTCACATCATGCCAAGGACTGAATCCTCTCTGCA CTTAG

>hg19\_ct\_UserTrack\_3545\_127 range=chr15:98298797-98442196 5'pad=0
3'pad=0 strand=+ repeatMasking=none 112

>hg19\_ct\_UserTrack\_3545\_133 range=chr8:36265645-36392642 5'pad=0
3'pad=0 strand=+ repeatMasking=none 103

TACCGCAGTCGACATCGCCCTCTAACATCTGGCTCTTCACTATATTTTAACTTCATTATCTGACA
CACAATCTCACTCTCTTTGTCCCAGTCACACAGGAATTTTTGTAGTTTCTTGAATATGTCTGTTT
TTTCACTTTCTGTTCTATTTTCCTATGGTTTCCCTTCAGCTATCTACATCCATACGGATCACTTC
CTCCT

>hg19\_ct\_UserTrack\_3545\_3 range=chr4:33402806-33637605 5'pad=0
3'pad=0 strand=+ repeatMasking=none 62

AAATTCAAGCTATTCAATTCCTCAAGGCACAGGGACTATAGTGAAAGAGGCGGGTGTGTAACATG
GTAAGGGCCAATTTTGAAAGATAAAATAAGTTTGATTTCCCTATAAATTAATCATTAATGTCAAA
GGCAAACCGATGCAAGGCCAGCATATGGGCCTCTGTGTTAGATTAACAAGGTTTTCCTAAAGTAT
TAACT

>hg19\_ct\_UserTrack\_3545\_22 range=chr13:68878800-69367599 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2080

ATATTATACAATTTTTTTGATATTTCCTCTTATACTTTAAAACTTAAATAGTATATATGTTCCAT
TTGAGCTATATAATTTGAAAGAATAATTCCATTTTTAAAATAAGACTATTCTAATACCACCTAAT
AAAAAGTCCATCTTTCCTTTTTGACTTGTTTTTGAAATGAACTTTATAAATAGCTACGGCAGCTT
CATAA

>hg19\_ct\_UserTrack\_3545\_171 range=chr1:99732213-99791812 5'pad=0
3'pad=0 strand=+ repeatMasking=none 146

AGACAGCCAAATGAACAATTTCATAAAGCTATGCTAGAGGGAAGGATAAGATGCTAAGGGAGCCA CATAGACGGAGATGTGATTCAATTTAGGGTACAGTAAGAGGTTTCAAAGAAAACTTACTGAGGGA AATCATGCCTAAATCATACTGAGTTCCTTCATTGATCTCACAGGTCCTAAAATCCTGCAGCAAAG TGCCA

>hg19\_ct\_UserTrack\_3545\_474 range=chr3:22605997-22661796 5'pad=0
3'pad=0 strand=+ repeatMasking=none 196

>hg19\_ct\_UserTrack\_3545\_74 range=chr4:179197207-179501806 5'pad=0
3'pad=0 strand=+ repeatMasking=none 906

TGATTTGCTTTTGAGTCTGTTTCAATCAAGATGCCTCTTTCAGAAAAAATTGTCTACTTGGCTTT
ATTAGAGTCAAGCTCTAAAACAAAGACCACCAGGCTTATGAAAAACTAAGGGTGTATCTTATGGG
TGTATATTTATCTCTAGAAATTCTCAGTTCTAAGGGAGAAGATTTTGTGACATTTTAAGACTATC
TCAGA

>hg19\_ct\_UserTrack\_3545\_213 range=chr15:25454308-25513307 5'pad=0
3'pad=0 strand=+ repeatMasking=none 20

>hg19\_ct\_UserTrack\_3545\_846 range=chr6:63914842-63955841 5'pad=0
3'pad=0 strand=+ repeatMasking=none 33

>hg19\_ct\_UserTrack\_3545\_177 range=chr3:85625711-85946310 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_945

>hg19\_ct\_UserTrack\_3545\_197 range=chr1:106250478-106564677 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_233

>hg19\_ct\_UserTrack\_3545\_132 range=chr18:58756221-58964620 5'pad=0
3'pad=0 strand=+ repeatMasking=none 18

TGGTCCTGGTCCTTTACCATTTTGGAGTCACAGATTAGATTCTTAAGAATCTGACAAACCCACAG
AATTCAATAATGTTTAAACAAGGCCACAGCAACAACAACAACAACAACAACAATTAAT
GTAGTCTCAGGGGGTTCATCGGTCATAGGTTTAAACATCATGCTCTAGAGTTTATTGGCCATTAA
ACACT

>hg19\_ct\_UserTrack\_3545\_99 range=chrX:3881001-4014000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 545

>hg19\_ct\_UserTrack\_3545\_46 range=chr3:161278507-161569706 5'pad=0
3'pad=0 strand=+ repeatMasking=none 276

>hg19\_ct\_UserTrack\_3545\_650 range=chr19:28733561-28780760 5'pad=0
3'pad=0 strand=+ repeatMasking=none 61

TTCAAACAGAGAGATAAAATCTTCCTCATCAGAGTGCCCTGGAATGGAGGAGCCTGTGCACCCC
TGGGCCAAGAAACTAACACCCATCTGCCCATCCTTCTTTTACACTAGCTCCACCCCAACCTAGGA
GATGCTCCAAGTCTAAAGATGTCTTCATCATACTTCCTCCCCATCCCAAGAGTCCTCCTTTTCTC
CAGAG

>hg19\_ct\_UserTrack\_3545\_89 range=chr15:61459909-61487308 5'pad=0
3'pad=0 strand=+ repeatMasking=none 69

>hg19\_ct\_UserTrack\_3545\_75 range=chr5:18954444-19638843 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3308

>hg19\_ct\_UserTrack\_3545\_23 range=chr2:77310893-78182092 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3069

CATAGTCATATACCCCACAGTAGAATCTGCACAAAATAATTTGGCTTTTTTAGAAACAGAGTTTA
TAAAGCATTGCAAAATTCAAGAACCTATAGAATATACAATACCAAGAGTGAAGACTAATGTAAAA

 ${\tt TATGGACTTTGGGTGATGTTGTCAACTTAGACTCATTAGTTGTAACAAACGTACCACTCTAGT}\\ {\tt GGGAG}$ 

>hg19\_ct\_UserTrack\_3545\_938 range=chr8:73166047-73195046 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_126

>hg19\_ct\_UserTrack\_3545\_22 range=chr13:68878800-69367599 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1869

AGGCAGATATTAAAATATAATTGAAATTCTGGATTTTTTAAATTATTCAGAAATTAATAATACAT
TTATTTTTACTATATATTTTAATATTGAATCTTCCTTGAATTAAATTTATTAGTGATATTACCAC
AATGCATTTGATAGTTATTGGAATAATTTCCCTTTTATTCTTATATCTACCACATACTCATGATT
ATGAT

>hg19\_ct\_UserTrack\_3545\_1355 range=chrX:80259545-80298944 5'pad=0
3'pad=0 strand=+ repeatMasking=none 105

>hg19\_ct\_UserTrack\_3545\_89 range=chr18:38197403-38515402 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1402

>hg19\_ct\_UserTrack\_3545\_235 range=chr11:101034391-101299590 5'pad=0
3'pad=0 strand=+ repeatMasking=none 231

>hg19\_ct\_UserTrack\_3545\_972 range=chr3:87448911-87553110 5'pad=0
3'pad=0 strand=+ repeatMasking=none 279

 ${\tt TGATTTGCTAGTATTTTGTTAAGGATTTTTGGGTCTATGTTCATCAGGTGTATTTGGCTTGTAGTT\\ {\tt TTCTTTTCCTCACTCTGTCTTTGCCAGCTTTGCCAGGGCGATGCTGGCTTTGTAGAATGAGTTAG\\ {\tt GCAGGAGTCCCTCCCATTCGATTTTTTGGAATAATTTTAGTAGAATTGGTACTAGCTCTTCCTTG\\ {\tt TATGT}\\$ 

>hg19\_ct\_UserTrack\_3545\_324 range=chr2:185050356-185204155 5'pad=0
3'pad=0 strand=+ repeatMasking=none 133

>hg19\_ct\_UserTrack\_3545\_278 range=chr6:155851709-156063708 5'pad=0
3'pad=0 strand=+ repeatMasking=none 924

>hg19\_ct\_UserTrack\_3545\_344 range=chr1:247650778-247739777 5'pad=0
3'pad=0 strand=+ repeatMasking=none 422

>hg19\_ct\_UserTrack\_3545\_166 range=chr7:88464865-88939064 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1350

CACTGACACCAACTGGGTAGGGGAAAACTATCTCAACCCATGTTTGCCTCCACTCTCACACAACT
ATAACCATCATCAACACAGAAGACTTATGTAACCAAAGGTACGGGGCTTTCGTCTCACACAGCAA
GCAACACACACGTGTTGGGTGTTCCCCCAATTCAGTTTTGTCAGTATTTACCTGGAAATAGTTTCT
GATCT

>hg19\_ct\_UserTrack\_3545\_64 range=chr5:10988401-11182800 5'pad=0
3'pad=0 strand=+ repeatMasking=none 75

TAGTACTTACATTCACAAGCAAGACTACTTCGCTGGGGACCTATTTTTCAGATGAAAGTCAAAAC
AGAAATCATTGCCTTAGGTAACCAGCTAAGACATTAATGCTCACGTATCAGAAGCCTGATTGTTC
AAAATTGTACCAGTTTTCCAGTCATTTTTGAGTGGAAGAAACCTATTAATGTAATCACATTAAGC
AGAGA

>hg19\_ct\_UserTrack\_3545\_371 range=chrX:94086745-94260744 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_762

>hg19\_ct\_UserTrack\_3545\_32 range=chr12:99492470-100013669 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2004

>hg19\_ct\_UserTrack\_3545\_839 range=chr6:58288442-58296841 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1

>hg19\_ct\_UserTrack\_3545\_715 range=chr5:50223244-50254643 5'pad=0
3'pad=0 strand=+ repeatMasking=none 131

>hg19\_ct\_UserTrack\_3545\_36 range=chr15:26874508-27016307 5'pad=0
3'pad=0 strand=+ repeatMasking=none 697

>hg19\_ct\_UserTrack\_3545\_295 range=chr4:107820152-107954551 5'pad=0
3'pad=0 strand=+ repeatMasking=none 553

>hg19\_ct\_UserTrack\_3545\_34 range=chr21:21332130-21815929 5'pad=0
3'pad=0 strand=+ repeatMasking=none 555

TTATTAAAATTTATGATCAATTACTGATTATTTTTAAGAATGTGGAAATAGAAGTTCATCCAAAG
AAATACTCCACCAACAATACCAATAGTCATTTAGCCAATAGCTAAGGATTCTCTTATAACAAATA
ATTTACAGGGACTCTTTACATTTGCAAAACTGACAATAGCTATCTTCTGTTAGTTTTTATATTAA
AGTTT

>hg19\_ct\_UserTrack\_3545\_181 range=chr1:103436413-103571812 5'pad=0
3'pad=0 strand=+ repeatMasking=none 520

GTGTATTTTAAATTATAAAAATGAGCTAAAATCATACAAAAAATGTAGGCTCATTTATTAAGCAG CCAGTTAACAGATGACTACTTACTCGTTACCCAACAGTACTAGGTACCCAAAAGGACACAAGCAG CATAAAATGCACAGTAGAATTAGCTGTCTGTGCTGATAAGGAAGTGCCCATCCTTTGCTTCACTT TGTGT

>hg19\_ct\_UserTrack\_3545\_719 range=chr14:88930048-88958447 5'pad=0
3'pad=0 strand=+ repeatMasking=none 95

>hg19\_ct\_UserTrack\_3545\_478 range=chr6:18627022-18717221 5'pad=0
3'pad=0 strand=+ repeatMasking=none 433

>hg19\_ct\_UserTrack\_3545\_286 range=chr7:153846668-153937067 5'pad=0
3'pad=0 strand=+ repeatMasking=none 105

>hg19\_ct\_UserTrack\_3545\_2041 range=chr2:226535357-2266001565'pad=0
3'pad=0 strand=+ repeatMasking=none 90

>hg19\_ct\_UserTrack\_3545\_941 range=chr6:80694882-80713081 5'pad=0
3'pad=0 strand=+ repeatMasking=none 63

>hg19\_ct\_UserTrack\_3545\_1286 range=chr3:131226511-131245310 5'pad=0
3'pad=0 strand=+ repeatMasking=none 81

 ${\tt TCCTGGGCAACACTAGAGAAATTATTTCAGAGCTTGAAGCCATATTTACTTTTTAGGAAAAAGCA} \\ {\tt TTTTTGTTCCATCAACAAGGCTGGAGTTTTAGAATCCTGCTATGTTCTCAGGAGTCACAAACAG} \\ {\tt GAATGGAATGGCAGCCTGATGCACCTTTATGAATTTACACTGGGGTTTTAAAATTAGAAAACACT} \\ {\tt GTACA} \\ \\$ 

>hg19\_ct\_UserTrack\_3545\_223 range=chr9:113871580-114061579 5'pad=0
3'pad=0 strand=+ repeatMasking=none 458

ATCATGAGTGAACTCCCATTCACAATTGCTTCAAAGAGAATAAAATACCTAGCAATCCAACTTAC
AAGGGATGTGAAGGACCTCTTCAAGGAGAACTACAAACCACTGCTCAAGGAAATAAAAGAGGATA
CAAACAAATGGAAGAACATTCCATGCTCATGGGTAGGAAGAATCAATATCGTGAAAATGGCCATA
CTGCC

>hg19\_ct\_UserTrack\_3545\_1846 range=chr4:182064807-1821602065'pad=0
3'pad=0 strand=+ repeatMasking=none 416

CAGGTCTGTTACACAGAATAGATTGTACAGGTGCAGTTTGGCCAATTATTGTAACTGTTTTCTTC
AGAGTCTTTTCTGCTTTACTCATCAAGCTCACTAGGAAACAGTCATTCCTTTTTCACTGTTTCTT
TTATACCCAGGCTTCCATATATTACCTTGAAATCCTAAATACGTTCCAAGGCTCCCCCATGTCC
AGCTG

>hg19\_ct\_UserTrack\_3545\_34 range=chr16:10008900-10125299 5'pad=0
3'pad=0 strand=+ repeatMasking=none 55

GCCACTGCACCCCACCAGAGCAAATATTTTCTTCCAACCTTAAAATAACATCTACAAATTAAT
TCAGTCTGTCAAGGGGAACTCTCCTTGGGTAATTCAGGAAGTTTTTTGCCTTTGGGTAAGGCACTC
TAGGCACAAACAACTCAAATTCTCACCTGTAAGTTGAACCAAGAAGGAGGTTTATGATCTACAGC
TACAT

>hg19\_ct\_UserTrack\_3545\_7 range=chr16:9391700-9678099 5'pad=0
3'pad=0 strand=+ repeatMasking=none 92

TTAGCCTCTTTTATAAGGACACTAATCTCATTCATGAGGACTCCACCCTCATGATGTAATCACCA
CCCACCTCCAGATAACCTCCCACTAAGACTTAGGTTTTAAAATATGAATTTTGGTGTGACACAGA
AATTTAGTCCATTGCAGGGAGCACCTTGAGCTGTAGAACAACTTGATGGCTATAGAAGAGGCTTT
TCTGT

>hg19\_ct\_UserTrack\_3545\_605 range=chr5:36379044-36398243 5'pad=0
3'pad=0 strand=+ repeatMasking=none 24

>hg19\_ct\_UserTrack\_3545\_27 range=chr3:84287111-85007510 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2919

>hg19\_ct\_UserTrack\_3545\_64 range=chr9:10856201-11319400 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1881

 ${\tt TATGTTTGGGATTTTAATTATCTACTAGGTGTAAAGCCTAGGACCTAGACAGAAGTGCAGATAAG}\\ {\tt GTTTGACTTATTCCAATATTAACTCCATGTTTCCTAGGTGTTACCTAGCTGCAAAGCAGGCAAAT}\\ {\tt TGTACAGCTAAGAGTTAAAGTGGCATTTTATAAAGCATTCAGGAGCCTAATCACTTTTAAATTGTATAAA}\\ {\tt ATAAA}\\$ 

>hg19\_ct\_UserTrack\_3545\_323 range=chr8:127751419-127822018 5'pad=0
3'pad=0 strand=+ repeatMasking=none 191

ACATCCTCTCCAGCACCTGTTGTTTCCTGACGTTTTAATGATTGCCATTCTAACTGGTGTGAGAT
GGTATCTCATTGTGGTTTTGATTTGCATTTCTCTGATGGCCAGTGATGATGAGCAGCCATAAAAA
ATGATGAGTTCATGTCCTTTGTAGGGACATGGATGAAATTGGAAATCATCATTCTCAGTAAACTA
TCGCA

>hg19\_ct\_UserTrack\_3545\_785 range=chr3:59244761-59294360 5'pad=0
3'pad=0 strand=+ repeatMasking=none 143

ACTCTTCATTCTTCTCCCATGCCCCAACCCTGCTCCTCTTCTAGCCTTTCTCCCCTCAAC
AAAGGGTAACCTATCCACCCATTCATTGTTCAAGTCAGTAACTAGATGTCATCCTTAATTCCACT
TTCTACCCCATTGTCCTCCCTACCCTCCTTTCCAATCCAGAAGTCTGTCAGCTCTGTCTCCAAAA
TACTT

>hg19\_ct\_UserTrack\_3545\_77 range=chr2:16643320-16668919 5'pad=0
3'pad=0 strand=+ repeatMasking=none 59

TGCTGTGACAAGAGGGCAGAGTTTTGTGATATTGCTTTTGAAGACAATGTCATCAAGATACAA
AAGCCATGGGGAATAGTGTGTATGGTGTGTATACAAGGGAAATGGGGAAATGGTGTGGGATGTG
AACACAAGTGTGTTTTGTAAGGGGTGGAAGGAGGAGAGAAAATGAAAACCATCACGTAGGG
AGTGC

>hg19\_ct\_UserTrack\_3545\_694 range=chr13:98227600-98241199 5'pad=0
3'pad=0 strand=+ repeatMasking=none 25

>hg19\_ct\_UserTrack\_3545\_148 range=chr7:74573665-74591264 5'pad=0
3'pad=0 strand=+ repeatMasking=none 10

>hg19\_ct\_UserTrack\_3545\_203 range=chr11:88720553-88830952 5'pad=0
3'pad=0 strand=+ repeatMasking=none 416

CATAGCCTGGGACATAAAGTCCACTTTTTAAGATACTTGGAAATTTGAAAACTACTTTCTAGTCT
AGTAGAGCTCATCTCTTTGTAAATATATTTAAATTATAAGACCAGGTCTTGTAGTAATTCTTCAT
CAATACTTTTGGAAAAGATAGTAAAATTTTTCACTTACAATAAAAAATAGGTTAAGTAAAATTGGC
AGCAG

>hg19\_ct\_UserTrack\_3545\_915 range=chr8:70855247-70858246 5'pad=0
3'pad=0 strand=+ repeatMasking=none 6

>hg19\_ct\_UserTrack\_3545\_145 range=chr18:63533821-63698820 5'pad=0
3'pad=0 strand=+ repeatMasking=none 694

TTTACAGAAAGCTGATTGGCCCATTTTGACAGGGTGCTGATTGGTGCATTTACAATCCCTTAGCT
AGACATAAAGGTTCTCCAAGTCCCCACCAGTTTAGCTAGATAAAGAGTGCTGATTGGTGCATTTA
CAAACCTTGAGCTACACACAAGGTGCTGATTGGTGTTTTACAAACCCTGAGCTAGACACAGAGT
GCTGA

>hg19\_ct\_UserTrack\_3545\_174 range=chr5:75182445-75312044 5'pad=0
3'pad=0 strand=+ repeatMasking=none 383

 $\label{total} {\tt TTTCATTGTACTGCACTGCTAGGCTAGCCCCACCATTTCTTTGTCCTGTATGCTTCTTTTATTTG} \\ {\tt GTTTTACCTCCATTTTGCTTGAGTACACTCACAACGAATTCCTTAGAAAGAGTGTATGGGAGGTT} \\ {\tt AATATTATAAGACTCTGCATATCTAAACATGTATTCTGGCCTCCCTTATGATTCTGGTTTGTCCT} \\ {\tt TGTAT} \\ \\$ 

>hg19\_ct\_UserTrack\_3545\_163 range=chrX:27638480-27701879 5'pad=0
3'pad=0 strand=+ repeatMasking=none 231

AACTCAGAAAAACCTGCCTGTAACACAGCATATTTGTTTTTCAATATTATTTTGTAGAATGTGCT ATATAAGCAATTGAAAGATTATAATTTTTTTGAATTCTGGTTTGAAAGATAATTTTGTTTTCTAT GCTTCTGTGATGTAAGGCAAAAACCCTGGACAATTTGTAACAGAATTGTTTTCATCATGTGCCAT CTTTT

>hg19\_ct\_UserTrack\_3545\_47 range=chr3:163487507-164524706 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2874

>hg19\_ct\_UserTrack\_3545\_635 range=chr16:62229100-62247699 5'pad=0
3'pad=0 strand=+ repeatMasking=none 69

ATAGCCGTTCTGACTGCTGTGAGATGGTATCTCATTGTGGTTTTGAGTTGCATTTCCTTAATAAT CAGTG

>hg19\_ct\_UserTrack\_3545\_1309 range=chr4:103061778-103102977 5'pad=0
3'pad=0 strand=+ repeatMasking=none 47

>hg19\_ct\_UserTrack\_3545\_29 range=chr13:86910400-87219399 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1366

TTACTATTTGAGATAATGGATATGTTCATTGGATTGATGTGATTATTTGGCACTGTGCTCATAAA
TCATAACATCACTTGTACCCCATAAATATATATAACTTTAATTTATTGATTTACCATTAAAACTA
AAAATTAAAGAGAAATTATAAAAGGAAATTTTATGCATAGGAATTTTTTGTCATTCCCAGTATGAG
GAAAA

>hg19\_ct\_UserTrack\_3545\_102 range=chrX:5031601-5186400 5'pad=0
3'pad=0 strand=+ repeatMasking=none 347

>hg19\_ct\_UserTrack\_3545\_222 range=chr10:129362611-129492810 5'pad=0
3'pad=0 strand=+ repeatMasking=none 288

>hg19\_ct\_UserTrack\_3545\_84 range=chr10:37319795-37415994 5'pad=0
3'pad=0 strand=+ repeatMasking=none 303

>hg19\_ct\_UserTrack\_3545\_492 range=chr13:53775600-53824399 5'pad=0
3'pad=0 strand=+ repeatMasking=none 152

>hg19\_ct\_UserTrack\_3545\_113 range=chr7:52986107-53254906 5'pad=0
3'pad=0 strand=+ repeatMasking=none 288

ATTACAAAACCTACAGCTTACCTTATTCTCAAGAAATATTGAAACATTTTTCCTGTAAGCAAGAA
AAAGATAAGGATACCATTATTGAAATTAAATATATATTTTTGATATCTCAACAAATTAGGAACA
AAGGGGAATTTCCTAGACTTGGTAAAAAAATTACAAAAACCATACAGCTAACACTGCAATGCTGA
GAAAC

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>hg19_ct_UserTrack_3545_1790 range=chr4:171181226-171295825 5'pad=0
3'pad=0 strand=+ repeatMasking=none 157
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 $\tt CTACAATTTACTAAAAAGCTATTATTATTGTGTTGTAGCAGTATTTCTTCAAGAGTTGAAATGAT\\ AGCTGGCTTTAGTATAGAAAGCCTGATAAAACTGTTATAAATCACTAGTGGTTTGGGAAAGAAGA\\ CTAGATTCTTATCACTTATGATTTCTACAGTTTCTCAGAGAATTGCTTAGGACTTTTGAGTCTCT\\ TTCTG$ 

>hg19\_ct\_UserTrack\_3545\_1530 range=chr6:158635613-158641812 5'pad=0
3'pad=0 strand=+ repeatMasking=none 21

>hg19\_ct\_UserTrack\_3545\_306 range=chrX:76140007-76380809 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1033

 $\label{totaggacatcctgaagggcagcag} TTCTAGGACATCCCTGAAGGGCAGCAGTGAAGGGACATCTTCCCAGTGGGCAGAACTTCGAGCAG\\ TGTACCTGGTTGTGCACTTTGCATGGAAGCAGAAATGGCCAGATGTGCTATTATATATTGATTCA\\ CGGGCTGTAGCCAATGGTTTGGCTGGTTGATAAGGGACTTGGAGGAAGCATGATTGGAAAATCGG\\ TGACA$ 

>hg19\_ct\_UserTrack\_3545\_449 range=chr11:16692025-16759024 5'pad=0
3'pad=0 strand=+ repeatMasking=none 162

>hg19\_ct\_UserTrack\_3545\_231 range=chr10:132366211-132858410 5'pad=0
3'pad=0 strand=+ repeatMasking=none 741

TGGCCAACCTGTGGGCTTGTTCTTAGACACTCCAGGTCACTGGGCACTCAGGAAAGGACAGTGGT GTGTCCCCAATGTGGACTTGGTGCTTTCTGTGTGGGCTTGATGCTGATGTACAAGTAAGGATTGC TGTTCCCTGTCCCCAAAGGGCCTGCCAGCAGCTGGACACCATCTTTCACGAAGTGTTCCTGTGGG CAGCA

>hg19\_ct\_UserTrack\_3545\_287 range=chr4:105416952-105613551 5'pad=0
3'pad=0 strand=+ repeatMasking=none 264

ATTGCAAGTACCCTAAACGTAGCTTATTGCCTTCCTTTCCTGTTTCCTGACTTCTCTGGGTCGTT
TCATTCGCACCTTTCTTTTAAGCCATCTGGGATCCTCTGTACAACCGAGCTTTAATGCTGGACAC
CTGGTCTGACAATGTTTGCTTCTCTCTTTCACCTGCCAGCCCTTTGTTCCTCCCCAAGATTGAAT
GAGCC

>hg19\_ct\_UserTrack\_3545\_1074 range=chr19:53239189-53251588 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_39

>hg19\_ct\_UserTrack\_3545\_57 range=chr19:22328361-22728560 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1464

>hg19\_ct\_UserTrack\_3545\_13 range=chr5:23978444-24504443 5'pad=0
3'pad=0 strand=+ repeatMasking=none 2041

GATCTCCACAATTGTACAAAAGTAATGCAAACTTATTTCTCAAAATTTTGAATAAACCTCCCAAT GAAATAGAGATCCATGTGTCCTATCATTCCTAGTTCCCTCAAAACTTTAATGAAATCACTTTAAC TGCCTCACTTTAAATTGGAAATCTTTTAATGTCTGTAGAGTCTATACACCCAATAACTGACATAT CAGCA

>hg19\_ct\_UserTrack\_3545\_61 range=chr3:3238201-3381000 5'pad=0
3'pad=0 strand=+ repeatMasking=none 191

GGAAAGACTGGCCTAGTACCTTGTCTACATGTTTCCCTTACAAGGTTCCTGACCTGTGGTAAGTA
AAGAATGCCATTTTTTGATAGGCCCGAGAACATCAAGATATTTGGGGAACTCAAGAAGTGGGGAA
CTCACCCAGTTCATGCAGGTATTGCATGGTGAATCTTTGGCTTGACTTTCTAGTCTCAAGGCTTT
TAAAA

>hg19\_ct\_UserTrack\_3545\_123 range=chr8:33857459-34313458 5'pad=0
3'pad=0 strand=+ repeatMasking=none 527

>hg19\_ct\_UserTrack\_3545\_25 range=chr16:6734400-6974999 5'pad=0
3'pad=0 strand=+ repeatMasking=none 121

AACACCTTTTAAGCCAACAGCTGAGCGATTTGCTATGACAAATCTGCCACTATGCATTCACTTAA
TTTCCAATTAATCAAACATTCAATAAATCATTAGTATAATTACACCTGTTCCCTTCTTGCCCTAG
CCCATTAGCTCAACTCAGGCGTCCCTTCGACTGGCTGTGGGGAAGGTGTTCATTTGTCTGCCCTG
GCTGG

>hg19\_ct\_UserTrack\_3545\_1682 range=chr1:176918578-176923377 5'pad=0
3'pad=0 strand=+ repeatMasking=none 23

>hg19\_ct\_UserTrack\_3545\_1824 range=chr3:192490707-192507106 5'pad=0
3'pad=0 strand=+ repeatMasking=none 28

ATCAACACAATGTGTTGGTAAGAATGTGAGACAACTGGAAATCTCATACATTCATGGTGGAAGTA
TAAAGTGATACAACACTTTAGATACCTGGAATGATCTACTATCCTCCGAGTCAAAAATTCTATTT
CTAGGTATATACCTAAAAAGGAACAACTGCATATGTCTAACAAAAAAGTGTGCGAAATGTGCATGT

>hg19\_ct\_UserTrack\_3545\_21 range=chr8:51375448-51762047 5'pad=0
3'pad=0 strand=+ repeatMasking=none 510

TGTGTATAGCAATCTTCTTCCAGCGTTAAGAAGGGAAAGTGGAAAATATACAACTTTGGAGTGGA CAAACCTAACAAACGCTACTGCAGCTGGGTGGTTAACGTCAACTGTGATGTCAAATTAATATAT GTACCCTTGATATGATGTAACAAAAATGGCCCTTTGCCTCTGTGATTTTCGTCCCCAAATCCATA
ATCCT

>hg19\_ct\_UserTrack\_3545\_424 range=chr19:13324001-13345200 5'pad=0
3'pad=0 strand=+ repeatMasking=none 35

>hg19\_ct\_UserTrack\_3545\_1727 range=chr4:163863151-163959350 5'pad=0
3'pad=0 strand=+ repeatMasking=none 18

CAAAATTTCCTTGAAATCTTCAGTGAGCCAAGTACATAGGTTTCAAGTGAATCCTTTTAATTACT
GCTGGGCTCACTAAAGAATATTTCCACCTTCACGAACAGGCCACACCAGCATTTCCAATACTACC
TGGCACCATCACACCTTCACCTCTGCATTTCAGCCACACAGCTGCTTTCTGTCTCCCATATGGCC
AATGC

>hg19\_ct\_UserTrack\_3545\_247 range=chr11:106190591-106592190 5'pad=0
3'pad=0 strand=+ repeatMasking=none 672

 ${\tt TGACAATTCAGCTATTAATTTTATTAAGGCTCTCTTTTATGTAGTAAGGTTTTCTCCTACTGCTG} \\ {\tt TTTTTAAGATTTTTCTCTTTTGTCTTTTTTGCCATCTTGGATACGATATGTCATAGGCGTTGATCTC} \\ {\tt TTTGAATTTATTCTATCTGGAGTTCATTAAACTTTTTGAATGTATAGATTCCTATTTTCTTTAAA} \\ {\tt TTTAG} \\$ 

>hg19\_ct\_UserTrack\_3545\_24 range=chr1:106903278-107031677 5'pad=0
3'pad=0 strand=+ repeatMasking=none 155

>hg19\_ct\_UserTrack\_3545\_925 range=chr3:77236311-77304310 5'pad=0
3'pad=0 strand=+ repeatMasking=none 217

>hg19\_ct\_UserTrack\_3545\_17 range=chr1:77592413-77609212 5'pad=0
3'pad=0 strand=+ repeatMasking=none 62

CAAAGCCATTCTAACTCAAAACTCTAGGTTTCTATATTAGTACATGTTAGGCCGTCCTGCCTTCC
ACATTCATTCGGCACTTGAGTTTTAGCGTCTATGTGTTTTTTCCCAAGAGATTTCCCTACTGTTG
AGCAAAGTGGAGCTTCCTCTGTTGCAAGCCACTGTTCAGCAATAGGCTCCTGCGAATACTTTCTG
CTACT

>hg19\_ct\_UserTrack\_3545\_23 range=chr2:77310893-78182092 5'pad=0
3'pad=0 strand=+ repeatMasking=none 4005

AATGCTACAATAATGTTATCTTTCAAAACTTCTTAGAATTATTCTGGGGAAAACTCCTTCACATT
TACACAGACGTTTAACAGTTCATTTTAACAGTTCATTTTCCACAAGTCTCATAGGTACTATTTTAC
TTTCATGGTATGCTTATTTTGATCAAAGGTAGGTCCTGTATCCTACAAAACAAAGACATGACTGA
AGGAA

>hg19\_ct\_UserTrack\_3545\_315 range=chr5:155550023-155696422 5'pad=0
3'pad=0 strand=+ repeatMasking=none 721

>hg19\_ct\_UserTrack\_3545\_35 range=chrX:65967276-66215075 5'pad=0
3'pad=0 strand=+ repeatMasking=none 674

>hg19\_ct\_UserTrack\_3545\_58 range=chr4:136292751-136339550 5'pad=0
3'pad=0 strand=+ repeatMasking=none 108

>hg19\_ct\_UserTrack\_3545\_2132 range=chr2:235412462-235453461 5'pad=0
3'pad=0 strand=+ repeatMasking=none 202

CAGGAATGTGAGGAGTCAGGGAGGTGTGTCTGGGGCAGAGGGCATGGCACGCAGGAAGGCAGGGA AGGATGGGCCCGCAGGGTTCAGGAACAGCAGCGGGGTGCAGACCAGAGAGTGCCCGGAAAGCACG AGGAATTTGCTTGAAACGTAATGGAAGCCCCTTTCCTCTGTTTGCTCACCCTCACCTTCCTGGAA GGTGC

>hg19\_ct\_UserTrack\_3545\_1056 range=chr7:75535865-75543264 5'pad=0
3'pad=0 strand=+ repeatMasking=none 3

>hg19\_ct\_UserTrack\_3545\_455 range=chr14:57767448-57770447 5'pad=0
3'pad=0 strand=+ repeatMasking=none 7

CTTATGACAATCTTGGAATTATTTTATTTAATGTTAAATATTTTCTGGCATTTTTACTTTAATT
ATTTTTAGCTATTCACCCACAAGTGCAGTAAGGCTGACATAATTACCTCCTTTAATTCACAAAAG
ACATGTATTTACCTATTTGTTATAATGCTTCCTATGCTAGCATGCTGTTACTATGACAAGACTAC
TCTGA

>hg19\_ct\_UserTrack\_3545\_313 range=chr3:163065707-163487306 5'pad=0
3'pad=0 strand=+ repeatMasking=none\_1595

 ${\tt TCTTAGGTTTAAGTCCATCTTCATTTGATTTTTGTATAAGATGAGAAAAGAGGATCCAGTTTCAT\\ {\tt TCTACTACATGTGGCTAGCCAATTATCCCAGCACCATTTGTTGAAAAGGGTGTCCTTTCTCCACT\\ {\tt TTATGTTTTTGTTTGCTTTGTCAAAGATCAGCTGGCTGTAAGTATTTGGGTTTACTTCTGGATGC\\ {\tt TCTAT}\\ {\tt TCTAT$ 

>hg19\_ct\_UserTrack\_3545\_1044 range=chr10:89053199-89053398 5'pad=0
3'pad=0 strand=+ repeatMasking=none 0

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AAGCACATAAATCTCATTTATTATAGTTCTAATATGAAAATCTGGATCTCTTTAGAACCAGCTTT
ATTAGGATCTCTTGGCTGCATATGTCAGAATCTCAACTCAAACTCTCTTATGAAAAAAATTCAGC
AGATG

>hg19\_ct\_UserTrack\_3545\_354 range=chr18:29267803-29290802 5'pad=0
3'pad=0 strand=+ repeatMasking=none 94

>hg19\_ct\_UserTrack\_3545\_456 range=chrX:126012720-126480719 5'pad=0
3'pad=0 strand=+ repeatMasking=none 1006

>hg19\_ct\_UserTrack\_3545\_104 range=chr16:62442500-62794899 5'pad=0
3'pad=0 strand=+ repeatMasking=none 229