Mus Musculus

>NC_000072.7:115903741-115916999 Mus musculus strain C57BL/6J chromosome 6, GRCm39

GAAAGGAACATTGCTTTTACGTGCTCTTAAAATGTAATCTAATCAAATGGCACCATGGGCAGGGGCAGGG
CAGGGGTGTTTTTGTTGTTGTTTATTTTGGTTTAATGAGGATCCATCTTGACAGTCTTGTGCTTGGAGCC
CAGGAGCGTTCCCACCGGGTGCTCGGCCTTGTGGCCCCTTTCCTTTTCTCCAGGGCACGAAGCGCGGGGG
CTCCAGTTGGGATCCACAGAACGCTGTGGGTCTCAGGCAGAATCTGGAAGGAGAACTCACACGCATTGGG
AAACTATTTCGCATACCCCTGTGTTGGTTATGGCTGGGAGAGCAGTAGGTTCCAGGGCCCAGGGGCTTCC
AGCCATGAGGGCACCTAGACTTGTAATCCCTAGAGTCCTCCTGATGCCACTGCCCAGGGACAGACAGCAC
ACAGCACCCCTCCCCCACTCTCTTAACAGGCAGAAGCAGGGAGATGGAGGCATGCTGAAGATGTCCATGT
GAGGCTGGTGGTAGCATGCCCACTGCTGGGATGAAGAGATGGGGGCAAAGTGAGTGGCAGAGGCCAGGCC
AGGTCCAGGCCCTTCCAGGCTTCCTCTGCCACTGTGGAGATGAAAGAGGGAGCCAGGCAAGGTCCAGGCC
CTCCCCACCCCCTCTGCCTCTATGGAGATGAAGGGGGAATGAAGAAGGGAGCCAGACAGTTGTGCCAACA
CAACTCCTCCGTCGAGTGTCTAATTGCTTATGATCATGCATGCTCTCTCTCCCACTAAACATTTATTAAT
GTGTTAGGATTTCCATTAGCGCGTGCCTTGAACTGAAATCATTTGCATATGGCTGGGAAAAAGTGGGGTG
AGGGAGGAAACAGTGCCAGCTCCCCAACAGGCGTCAATCACAGTGACAGATCAGATGGTTTCTGGCTGGA
GGCAGGGGGGCTGTCTGAGATGGCGGCATGCATCCTTTCAGTGCATATCACAGAAATTCAGGTGACTCCT
GCTGGGAGCCAAGACCCTGAGGCTGAGCCTGGCCACAGCTCCAATAGCTGCTGGATATCATCATGTCTGG
GCTGAGCAGCCTCTAGAGGTACCCTTTTACAGATAGTAAAACTGAGGCTCAGTGACTGCTGAGCCAAAGT
TGGACCCACCCACACTCATTTGCAGACTGCCGTGGGCCATGTTCTGATCTCTTCCCTACCTGGACTCAGC
CCAGCACACTCGGCACACAAGGCCCTTCTTCAGCTTGAATACAGCGTCCTCAGCTATAGCCAGCATCTAT
GAATGGAGCTCAGTGACCCTGACTGGAGGAAGTTAGGACAGGGATTTTTTCTGGAGTTTTGGCAGGAAGA
GGCCAGGGTCAGGTGACTGCTGGAGCACACAGCTTGGTAAGACTAGTCAGGACCTGCGTCCTGAGGCTAC
ATGTCATATCCACAGTAAGGAAGTGGAAGATGGGAGATGACTGGCTGGGCCACAACCAGTGAGTGGAATG
TCCTTGTGCATCTTTGTTTCCTAACCTTCCCCTCTGTAGCTGCTGAAACACACACACACCCCATGCTCTG
TTATGCCTCTTCCCTGGCCTGGGATTTCCATGGCTGAGGTGATGGGGCACTGAGGCACCGCCAGGAAAGG
CTGTAACCCATCTGCTCCCCCATCCTTCACCAGACTTCAAGCACCTACCTAGAGCACAGGTGCAATTTTG
TACCCTCCCTGTCTGGGACCCACAGTGGTTCCTCAATGCCGGCCAACCAGACTCATAGGCCTGCCCACAA
GGCCCTTGGGGCTATCTGTCTGAGGCCTGCAGGTGCCCTCCTGGCCACCTAGGCTCCTGTGAGACTTAGA
CTTCCATAGATTCTTCCTGAAAGACTACTGAGGGCAGGAGCCCCCAAGCCTCAGGGTTAGCTTTCCTCAG
CCCTGCCTCTTTGCTAGCTCCGTTTCCACATTGAAGGCAGGGCTGAGCAGGGCAGGCGCAGCGAGGAGCT
AACTGCTGCTTCTCTCTCGTTCATTTGTCTGCTGCCCTGAGACGCCACAGCACCTAATAAGAGCATGTTA
TGTGTAGCAAACATTAGGCCTGTAAGGAAGGAAAGGAGTGACGTCCCTTGACGTCCTCAGCTAGGCTGTG
GTGACACAAGCAAGAGGACTAAGCCACAGGTGAGGAGAAAGGGGGGGGGGGGTCTGCTGACCCAGCAACA
CTCTTTCCTTCTGAGGCTTAAGAGCTATTAGCGTAGGTGACTCAGTCCCTAATCCTCCATTCAATGCCCT
GTGACTGCCCCTGCTTCTGAAGGGCCAACATGGCTACAGCTAGCTCCAGAGACAGCTTTTCAGGGCCCCA
GCATCCAAGCATCTCACAGTTCTCCACTGACCACACTCCTGTGCAGCACTGGGCTTTTCAATGCCCCTGA
CTTGAAGAGAACTCAAACTGCAGGTCAACTAGACTCTGCAAACTTCACCTGTGCTGGGGGTTCCTAGCCT
GTGGGGACAGTGTATCTTGAATACCTGCTGCTATGGACCAAGAGCTGAACACACAGACAAACAGGCTCAG
CTGGCCGGCATTCTGGAACCACAAATGAGTGTGGATGAGCAGGAGGGCAACAAAATGGTCTGGGTGTTGT
CAACACAGTCAGTAAACAATGCACGCAGTGGGGCTGGGCCCTGATGTGGAGCTAGGTGGGGTTGGCTCTC
CTTGGAAACCTGAAGGGAGAAGGAGAGGGAGCGAGATGATGAGGTTTATCAGCCTGCAGAGGCAGGGGGT
CAGGAAGGAGTGCCACTGTACTGACCCAGGACCTCTGTGGGACATCAAGCCATGCCAAGGAGCCATGGAG
CCTCGATTGCACTGGCAGGGACAGGTTGTGATGCCCCAGAGTCCCCAGACCCAGCAAACAGAGGCCCAGA
GTGGGAAGTGGAGCTTTCCAGGGTATCGGGGTGACTCAGAGACACAGGGTAGAATCTGCCTTGGGTGCTC
ACTGCCCTATCTGAGTCCACATGGCTCAGTCCCCAGGCCCTGTTCTCTAGTGACTGTTGCTTTGATGAGG
TAGAGACAGGCAGCCCTCTTCTAAGAACTATGTTTTGATGGGGGACTCAGAGTTGGGGTGGGGTGGCAAT
GAAATTCTGTAGACTGTGTGGTTATAACCCTGGCTGTTACTAGCTAGTTCTGTGACCTTGGTGACCCACT
TCAGACTCTAGGCCTCAGCCTCTGTAAGTGCAGATACACAGCGCCAATCAGCCGATGACTTCTAACAATA
CTCTTAACTCACACAGAGCTTGTCTCACTGAGCCAACACCCTGTACCCTCAGCTCAGTGACGGCTTTCAA
CCTGTGGGGCTGCCTCTGTTACCCAAGTGAGAGAGGGCCAGTGCTCCCAGAGGTGACCTTGTTTGCCCAT
TCTCTCCCTGGGTCAGCCAGTGTTTATCTGTTGTATACCCAGTCCACCCTGCAGGCTCACATCAGAGCCT
AGGAGATGGCTAGTGTCCCCGCGGAGACCACGATGAAGCTTCCCAGCTGTCTCAAGCACAAGCTGGCTGC
AGAGGCTGCTGAGGCACTGCTAGCTGGGGATGGGGGCAGGGTAGATCTGGGGCTGACCACCAGGGTCAGA
ATCAGAACCTCCACCTTGACCTCATTAACGCTGGTCTTAATCACCAAGCCAAGCTCCTTAAACTGCTAGT
GGCCAACTCCCAGGCCCTGACACACATACCTGCCCTGTGTTCCCAAACAAGACACCTGCATGGAAGGAAG
GGGGTTGCTTTTCTAAGCAAACATCTAGGAATCCCGGGTGCAGTGTGAGGAGACTAGGCGAGGGAGTACT

TTAAGGGCCTCAAGGCTCAGAGAGGAATACTTCTTCCCTGGTTAGCCTCGTGCCTAGGCTCCAGGGTCTT
TGTCCTGCCTGGATACCTATGTGGCAAGGGGCATAGCATTTCCCCCACCATCAGCTCTTAGCTCAACCTT
ATCTTCTCGGAAAGACTGCGCAGTGTAACAACACAGCAGAGACTTTTCTTTTGTCCCCTGTCTACCCCTG
TAACTGCTACTCAGAAGCATCTTTCTCACAGGGTACTGGCTTCTTGCATCCAGAGTTTTTTGTCTCCCTC
GGGCCCCCAGAATCAAATTCTTCCTCTGGGACTCAGTGGATGTTTCACACACGTATCGGCCTGACAGTCA
TCCTGGAGCATCCTACACAGGGGCCATCACAGCTGCATGTCAGAAATGCTGGCCTCACATCCTCAGACAC
CAGGCCTAGTGCTGGTCTTCCTCAGACTGGCGTCCCCAGCAGGCCAGTAGGATCATCTTTTAGCCTACAG
AGTTCTGAAGCCTCAGAGCCCCAGGTCCCTGGTCATCTTCTCTGCCCCTGAGATTTTTCCAAGTTGTATG
CCTTCTAGGTAAGGCAAAACTTCTTACGCCCCTCCTCGTGGCCTCCAGGCCCCACATGCTCACCTGAATA
ACCTGGCAGCCTGCTCCCTCATGCAGGGACCACGTCCTGCTGCACCCAGCAGGCCATCCCGTCTCCATAG
CCCATGGTCATCCCTCCCTGGACAGGAATGTGTCTCCTCCCCGGGCTGAGTCTTGCTCAAGCTAGAAGCA
CTCCGAACAGGGTTATGGGCGCCTCCTCCATCTCCCAAGTGGCTGGCTTATGAATGTTTAATGTACATGT
GAGTGAACAAATTCCAATTGAACGCAACAAATAGTTATCGAGCCGCTGAGCCGGGGGGCGGGGGGTGTGA
GACTGGAGGCGATGGACGGAGCTGACGGCACACACAGCTCAGATCTGTCAAGTGAGCCATTGTCAGGGCT
TGGGGACTGGATAAGTCAGGGGGTCTCCTGGGAAGAGATGGGATAGGTGAGTTCAGGAGGAGACATTGTC
AACTGGAGCCATGTGGAGAAGTGAATTTAGGGCCCAAAGGTTCCAGTCGCAGCCTGAGGCCACCAGACTG
ACATGGGGAGGAATTCCCAGAGGACTCTGGGGCAGACAAGATGAGACACCCTTTCCTTTCTTTACCTAAG
GGCCTCCACCCGATGTCACCTTGGCCCCTCTGCAAGCCAATTAGGCCCCGGTGGCAGCAGTGGGATTAGC
GTTAGTATGATATCTCGCGGATGCTGAATCAGCCTCTGGCTTAGGGAGAGAAGGTCACTTTATAAGGGTC
TGGGGGGGGTCAGTGCCTGGAGTTGCGCTGTGGGAGCCGTCAGTGGCTGAGCTCGCCAAGCAGCCTTGGT
CTCTGTCTACGAAGAGCCCGTGGGGCAGCCTCGAGAGCCGCAGCCATGAACGGCACAGAGGGCCCCAATT
TTTATGTGCCCTTCTCCAACGTCACAGGCGTGGTGCGGAGCCCCTTCGAGCAGCCGCAGTACTACCTGGC
GGAACCATGGCAGTTCTCCATGCTGGCAGCGTACATGTTCCTGCTCATCGTGCTGGGCTTCCCCATCAAC
TTCCTCACGCTCTACGTCACCGTACAGCACAAGAAGCTGCGCACACCCCTCAACTACATCCTGCTCAACT
TGGCCGTGGCTGACCTCTTCATGGTCTTCGGAGGATTCACCACCACCCTCTACACATCACTCCATGGCTA
CTTCGTCTTTGGGCCCACAGGCTGTAATCTCGAGGGCTTCTTTGCCACACTTGGAGGTATGAGCAGAGAG
ACTGGGGCGGGGGGGTGTAGCATGGGAGCCAAGGGGCCACGAAAGGGCCTGGGAGGGTCTGCAGCTTACT
TGAGTCTCTTTAATTGGTCTCATCTAAAGGCCCAGCTTATTCATTGGCAAACACTGTGACCCTGAGCTAG
GCTGCTGTTGAGAGCAGGCACGGAACATTCATCTATCTCATCTTGAGCAATGCAAGAAACATGGGTTCAG
AGAGGCCAAGGACTCACCGAGGAGTCACAGAGTGTGGGGGTGTCCTCTGAGGCAGCTGAGCTGGGGCACA
CACAGACTGAGCACCAGGAGTGAGCTCTAGCTTTTTTTTTTCTATGTGTCTTTTCTAAAAGACACATAGG
TTTAGGACTGTCCCTGGTCCAGGTAAGAACTGGTTCAGTAAACTTGTACATCTCACTGCCTGGCCAGCCC
TGTCAGCTTCCACCAGAGTGCGTGCACTACACACCCGGCATCTCAAAGGATTCATTCCTATCTTTCCTAT
CTTTGGAGTGAGGCACAGTCTCACGTAGTCCAGTCCAGACTGGCCTTAAATTCTGCAGCTGAGGATGTAC
TTAAACTTGTCATCCTCCTGCCCCAGCCTCTCAAGTGCTGTGATCACAGGCACGGACCACTATGCTACGC
CAGGTGTTTCCAAACATTTTCTCTCCCTTAACTGGAAGGTCAATGAGGCTCTTTCGAGAAGCAACAGAGC
CTGTTTAGCTGAGAAAACTGAGGCAGGGAGCAGGCAAAAATCACATCTAGAGATATGGGAGAGCCAGGAC
CAGAGCCAGGGTCTCCGGGCTGGGACCTAGAGATGTTTCCAGTGGATACAGGAGGAAACAGAAGTGGGTG
TAGCAAAGCCCAAAGCCAGGGTGATGGGTGGGTCGAGCTTGCTTATCTCCCCGTGTCCAGGGTACTGCCT
TGGTAGCACTGTTGGGCATCTCTGTTACCTTCTGTGGTCACACACACACACACACACACACACACACACA
CACACACACATACACACACACACACCCAGGTTCTGGATAGAAGCTGGGGTACCATGCCGGTGAGCTTGTC
TCTGTGGGGTCAGACCCAGGCCACATCTACCATCCAGGATTCTTGTTGGTAGCACTCCTGTTATTCAGAA
GTTTGTTACGTGGTCCTTCCCCACACTGGGCTTCTGAGGCTGACATATGGACTAATGTCTGGAGCCCCCT
CTTTACCCATCTTCTTCCCCTGCTAAAACACTAGCCAGGGTGTGGCCCTAAGCCCCAGCTCCAGGCACTC
CGAGGCAGTCTCTCATGAGCCTAAAGCTCTAACCAAACAGAAGAGCTTCTGTTTTGGCACACGGGTTCTT
CACCCCATCCCTTTCTCCTCGCCAGCCCAAACTCACTGCAGTCGCTAAGGCTTGGATCAAGCCTCAAACC
AGAAGCTTGCATCCTAGCCTGCTCTCTCTGAGGTGAGGTTAGAGCTGGAGGACTGACGGCTACTAACTGC
CTTACAGGTGAAATCGCCCTGTGGTCCCTGGTGGTCCTGGCCATTGAGCGCTACGTGGTGGTCTGCAAGC
CGATGAGCAACTTCCGCTTCGGGGAGAATCACGCTATCATGGGTGTGGTCTTCACCTGGATCATGGCGTT
GGCCTGTGCTGCTCCCCCACTCGTTGGCTGGTCCAGGTAATGGCACTGAGTATCGGGTCTGGCAAGGTCT
TTGTGGGATTCCCTTTGAGGACACAGAGCCCTCGGATTGGTTCCAGGCATAATGTAACATGGTATTGCCC
CCCGAAAACCATCCTGGTGACTTTCCCAGGCTAAGGTCTAAGGTAGGGGAGAAGAGAGGGACTGAATGGT
CCAATCAGTCTTATTCCATGTCTGAGACCCATAACAAGGAGAACCCTGGACATTCCAACCCTTCACCTTG
GCCGAGTCCCTAATCCTCGGCTAAGCCAAGGCCAAACCACAATCCTCTTTGGTTGAGTTCTGGCCGTGGG
CCTCTCTCTCTCTTCCTCTCTCTCTCTCACTCACCTTGGACCTTAGCCCCTGGAGAGGCTGAACCTTCCC
AAAATGCATGGTGACATTGTAGCCCCAGGAACTGGGTCCCATCCAGCCTCCAGGCCACCATATCTAAATG
AGACAAGAGAAGGTTGGGACAGTGGTTTGGACACCTAGACAGGCTATGAGGTACACAGAGCCTCAGAGAC
TCTCCATTCTCTGTCCTCATGTCCTCCCCACCCCGGGAGCCCACCCAGTGGCCCTCACTGAGTCAGAGCC

CCTCACTCCTCACTGGCCTCTTTCCTCATCCTCACCCACCTGGCTTGGCAGGCCTCTACAGACACACTCA
GTGGACACTTGGGTTTCTGAGTGTGGCCCAGTGTCACCGTCCTCAGATATCATCACAACATCCTTGTTTC
TAGAAGCTGCACACAGCCCTGATGCCAGCAGCGAGCCCACCTTTACTGTAGAGAGCATTGCCGTTACTAG
GAGATCCCATGCACAAAGTGCAGCATTCCCAGGGAAGGCCTCAGAGAATGCTCCTCTCTCCAGCATTCTC
TGCCTACTCCCTTAACCACCGAAGGCAGGGCAGCAGGCTAGTGGAGCAGAGCTGCGTGGTCAAGTGGCAG
GGAGCTTAAGAATCGTCCAAGGGCGGAGACCAGTAAGTCTCATTAGGTGATGGGGCCAGCAGGTAAAAGC
CATTCATGCTTATGTCCAGCTGGGCGTGTGTTCTCTTCCTGTTTTATCATCCCTTGCGCTGACCATCAGG
TACATCCCTGAGGGCATGCAATGTTCATGCGGGATTGACTACTACACACTCAAGCCTGAGGTCAACAACG
AATCCTTTGTCATCTACATGTTCGTGGTCCACTTCACCATTCCTATGATCGTCATCTTCTTCTGCTATGG
GCAGCTGGTCTTCACAGTCAAGGAGGTATGAGCAGGGGGGCCGCCCCAGCCTCGTGCCGGGTGGGTGGGC
AGAGCCAGGTGGGCAGAGCTGGGTGCCAGGGTTCGTACAGACGCCATGGGCTAGACACAGGTCTGTGTCC
CTGCAGGCGGCTGCCCAGCAGCAGGAGTCAGCCACCACTCAGAAGGCAGAGAAGGAAGTCACCCGCATGG
TTATCATCATGGTCATCTTCTTCCTGATCTGCTGGCTTCCCTACGCCAGTGTGGCCTTCTACATCTTCAC
CCACCAGGGCTCCAACTTCGGCCCCATCTTCATGACTCTGCCAGCTTTCTTTGCTAAGAGCTCTTCCATC
TATAACCCGGTCATCTACATCATGTTGAACAAGCAGGTGCCTGGGCTGAGGCAGGGCGTGTGGAGAGTGA
GGGAGAGAAGGGGAGGGGGAGAATGGGACAGGGGAGGCATTGCACTCAGACTGCTGGCAGCCCGTGAGCT
CTCAGGCTGGCGAACCCCCAAGCTCTTGGAGTAAGTCTTCCGGGTGACCTGCCGTCCACTCCTGTGAGAT
ACAGCCGACCAAATGGTTCTGGAAGTCTGCTTTAGAAGTAGGCTAGAAGTCAGGTGCAATAGTGCAAATT
TGTAATCTTAATTCTGAGGCAGGAGGATCTTGAGCTCCAGGTCAGCCTGGGCTAAACAGTGGATGTGTGT
CCCCCTCTCCCCAAAGCAGGCTGTGAAGCACACTGCTATATCCCAGCATTCAGGAGACTGAAGTAGGTCG
ATTAGAAATTCAAAGCTATCTTTGGCCATACAGTGATTTGGGAGCCAACCTGGGCTACAATGAGAATCTG
TCTCAAGAAGCAACCAGAAATATCAAGTAGTTCCAAGTCTGGGAATAGAATGGTCTCACTGTAAAGCTGA
AGAAATTGCTAGAAATGCTACTTGTAGGAAGTCAGGGATTACACCACTGTCAAACGCCACAGTCTCTCTG
CAGAAAAGGATGTGGTCTCTGGAACCTAGACTCTGGGTTCAAGTTCTAGTTCTGTCCCATTTAAGCTGTG
TGACCTTGGGTGAGTCAGATATCTCCCCATGTGGACTTCGGTTTTCCTATTTATAGGAAGGGCCAAATCA
TAAACTCTCAAATCAATTGAGATCACTCACGGAAGGCCCTACGCATCCACAGGACACATGGAATGCCACT
TGACAATACCCCTTGTGCTATCTGTGTACCTGGCGTCTCTGGTTGAAGGGCAACATACATTTAGCAAGCT
CCCCCAGGGAGCCAGGCTTAGTGAGGGGACATGCTGGAGGTGAGGCTGAAGCTGGGCAGGTGGTAGGGCC
TGTCCTGACTGGAGCCTCTTGCCTTCCAGTTCCGGAACTGTATGCTCACCACGCTGTGCTGCGGCAAGAA
TCCACTGGGAGATGACGACGCCTCTGCCACCGCTTCCAAGACGGAGACCAGCCAGGTGGCTCCAGCCTAA
GCCTGGCCAGAGACTGTGGCTGAAAGTAGGAGTCTCCTGTCCCCACACACCCCAGCCACAGCCCCCACCA
GGAGCAGCACCCGTTGGGATGAGGTCATGCAGGCTCCCTCAGTGTTCTTTTCTTTGTTTTTAATGAATTC
ATGAAAGCAAAATGAGGCTCCCCACTCAATGGGGACAGCTTGACAAAGGGCATCCATCCACCAAGACCAT
CCTCAACCTGGAGTCCCCAATTCCCGGGGGGCCAGCGGGATCTGTACCCCTCCCTCAGCTTGTCTATCAG
GAACATGACAAGTGTCCCGGCTTAGGGCTAAATGTCTAGGACAGAATGGAACACATAGTAGCTGATTAAT
AAATGCTAGCTGGATGAAGGGAGGAATGAGTGACTGACTGAGTGGATATATGAGTGAAGGGATTAATGGA
AGGGAACATGGATGTCCTCAGGTGCCCAACCTGGCAGATCCAGTCATGTCTGGCTGGAATCTATAAGCAG
TTTTACATACCTGCCCTGGTTTTCTCTGCCCCCACCCCCACCCCAGTTGGATCTCCCAAATCCAGGGCCC
TGATAGAATATGGCTGCTTCAAAGACAGAGAGATGAGGGGAGGGAGGGGGGAGGGAGAGAGGGAGGGAGG
GAGACACAGAGAGGGAATATGTGTGATGCGTGTGTATGTGTGTATGTGTGTGTGTAAACACTTTGTATAT
AAAGAGTACAGCTGGTAGTTATGTTACAAGTAACACCGACTAATATAATTAATTAACCATCCTAATGGTC
TCTGCTTGTTAGTGACTGCTTGGGAATTAGGCAGGGCCCAAGCACTCAGATAAGGTATTTCCCTCAGCCT
CAGTAGGCTTTTGCAAATGACCCAGGCCTTCAGGCCTGTGCAGGGCTAGAGCTGGATTACAGAGATAAAT
GACAGTGACAGCAACGTGAGCTGCAGCCCTTAGGACTGAGAAAGCATCGAGACCAGGGGTCTCCGGCAAG
GCCTAGGTCCTCCCTTCAGTATGGAAACCTTGCCTCATGTCTCTCAGCCTCCTTGGCCTGTGGAGATCCA
GCCCTTCCTCTTGGCTTCTGGATACATTTGCTCTTCTACACCAGCAACCAAGTGGCAACAGTTCCAGGCC
AGTATGGAGTTTTAGAAGCCATGCCAATATGCCCACCTTCAGGGAGCAGCTGAGTCCTTGATGCCACCCT
TGTTCTGAAGAGTTCAGAAACACAGTGCAAGACATGACCAGGCCTCATCCTTAGGATGCTCATGGATCCA
GTTCTTAGCTCCCTTGTTGGATATGCTGTTTTCCTTGGCCTTTGGTCTTTTCTTTATCCCAGAGGGTTTT
GGCTTTAAGGCCAACAGGAACTATGGGGTACCAGAATTGAGCAGCCTCAGTCTGCATCCCTCCTCTATAG
AACCACAGCTGGGCCCTCAGCAGGCCCAACTCTGCATGGGGACAGAGGCATTAAAAGCTCAGCTCCTACA
CTTGGTGGCAGTGGTGGTCTGTTGCTCTCAAGCTCTTTCAAAATGGATGGAAACTGGGACGCTTCCCTGA
CCCCTGGTTATGAAAGACTAGACTGTGTGGGGACAAACAGTCCAGAGTCCCGGGGAATGTGATAGAGCAG
CTCCATCATTTTTAGAAACCCAATTTGAGGCAGTATAGAGAGATGGTGACCTCTATAAGCCTCTGTATCT
GCAAAGAGGAGCTTAGACCTGCCCTTGAGGGGATTATATGAGATTTAAGGGACTTATGTGGCCAGCCTAC
TTCCTGGCATGCTGAAGACATTGGCACACTCTGGTATTCTAGACCTTGGCTCAGAGCTGCCTTTACTAGG
ATACTGTCACTTAGCAAAAGAATGGGATGGAGCCTCAGATGTGGAGTGACACCATCTTCCAAGAAGGAAA
GGGTGCCAGGGTCTGGGATGAAAGCCCTTTGGTGCTATGTTGGGCAAGGGCGAGTGCCAGCAAGGGGTTA

TTTGCTTGCTCTCTCCATCAGTGATGAGGTTCCATTTGGTCACAAGAAATTCACCCCAATTGCTGAAACA
GAGGCTGACTATTGGCTTATAGGCATGAAACCCCACTCCCCTCCACTTCAGGCTGGCTAGATTAAAAGCT
CAGACCTGTGACCCCTTGTGTCTCTCTTCTGTGTTGACTTCACTCACAGGCCTAACCTCAGAGGTGTCTG
TAGCAGTCCCAGGGCCAGACACCCTTCCAGAAAGGGGCTTTCCTTCCCTTTATAATCGTGGTGACAGGTC
AGATTCTTATTGGGCAGACCTAAGTTACCTGATTATCCTTAAGCCAATCATCATGTCTAAGACAGAGATT
CATTTGATTGGCCAGGGCTGAGTCACTTGTTTACCTCTAAGTCAATCAACAGGCCTGAGATGGAGAGTCA
TCTTCTGATTAGCTAGACCTGGGTCACCTGATCACCTCTAAGCCAACCACTATGTCTGATATAGGGCTCC
CTCATTTGTAATGTGTTCCCACACTACAAGATAAAGTTGACTCCACATAGTTAAGGAGCCTGTAGGATGT
GTTCCCCAAAAGCAAACAGGGGAACAGGATCAGGACCAGCCCTGAGGGGTGGGGACTGGGATGTGCTAGA
CAAGGCTCCGGGGTGTCATGGATGAAGGGGATTCCATGGCTGCCACACCTCTGGTTGTCTCTCATGCTTT
ATGGGCCAGGAGTGCCTGTTGGAAGGCTACTTTAGCTGCCTGGCCTTGACCTCCCTCACTCCTCCATGCC
CAGTTCACTTGTCCTGTGGGGTGTCATCTTTACTCCTGCCTTCTCCTGCCCGGGAAAAATAACCCTTTAG
AACCAGAATGCTCTTGTCAGCCTCCCTCGACAGTCACTGTGAGTGTAGACAGAAGAGCTCCTGCCATGAG
CTGGGACCTGGAGTCCCCACAGGGTCACCTGCCAGGCTCCAAGCAAGCAGCCTTTGTGGAACATACAACA
CACTCAGCCAATCACAGGTCAGACAGGGCTGTCACCCCAATAAAGAGACACCTGGGTTACCAGGTAACCT
GAGGTGCCCCAGAGAAACACAGTGCCAGTCCCAGGGTAAGTCCCTAGACTACACAGGCCACAGCTCTGAG
CTGAAAGTGAGAGACACCTTAGCTGGTGGAGGCTTTATTTCTGTATTTGTTTCCACCCACGGTCACTTTA
CCTCTGAGAAACATTGAGGGTGACCCCAGATATATAGGGAATTAAATAGGAACACAAGTCAAATATCTAC
TGATAATCATAAAGAAACCTAATGTGAAGTAAGTCTTTGATATATATATGCAATTTTACAATTGATTAAA
GATGAAAATAAATTTGCATTCTAATGAGA

Bos taurus

>NC_037349.1:c56231448-56225120 Bos taurus isolate L1 Dominette 01449 registration number 42190680 breed Hereford chromosome 22, ARS-UCD2.0, whole genome shotgun sequence

ATGAACGGGACCGAGGGCCCAAACTTCTACGTGCCTTTCTCCAACAAGACGGGCGTGGTGCGCAGCCCCT
TCGAGGCCCCGCAGTACTACCTGGCGGAGCCATGGCAGTTCTCCATGCTGGCCGCCTACATGTTCCTGCT
GATCATGCTTGGCTTCCCCATCAACTTCCTCACGCTGTACGTCACAGTCCAGCACAAGAAGCTGCGCACA
CCCCTCAACTACATCCTGCTCAACCTGGCCGTGGCCGACCTCTTCATGGTCTTCGGGGGCTTCACCACCA
CCCTCTACACCTCTCTGCACGGATACTTCGTCTTTGGGCCCACGGGCTGCAACCTGGAGGGCTTCTTTGC
CACCCTGGGCGGTATGAGCTGGGTGCGGTGGGCTGGGCGAGGGGTGTGTGTGTTCAGGAGCCAGGAGCTT
GGGTGTGGTGGGGGGTGGGTGTGTGGGGACAGCCCCAGCCTTGCGGATGGTGGACGAGAGCCTGTGAACC
AAAGCCGTCCCTTACTCAGTCAAGCTCGGCTGGCGTTGGTGGAGGGCGGGCGCCGAGCACGTGATCTCAC
TGGCACTGGGGTCGTTGTCTCACCCTCCAGCCAGGAGACAGATGAGAGGAGTCCGGGGCCTCACTGGGGT
CGCAGGCGGTCTCTGGCAAGGCCGAGTTGCAAGCCCACATCTCTGCGGCCCCTCAGGCCACGGTTCTGCT
CCCCTTGGAGCACCAGGGTTGGGCGAGACCCACGCCGGGTCCCGGGACAGAGAGCTGCACGACACCGGTG
CTTGTGCTCAGGGCCCCAGCCTGGGCGGGATGAGAGTCCTCAGTCCTCCAGCACCAGCCTCTGCCTGCAC
TGGGTGCAGGGCGTGGTCCCTCCCCAGCTTCTCTCTGACTCCATCCCAGCCACCTCCAGGCTCTCTGCTC
TGCTTGAAGGCTTTCCGCCTTGAGGAGTCCATTCACAGGGAGACAGTAGGCCCGGTGATCTGCGTAGCTG
CGAGCCATGCTTTTAAAATATTTTCACTGAAAGACGGGTGAATAGATCCCATTTCGCCGATGAGAAAACT
GCAGCGTGCAGAGGGGAAGAGTTGACTCAGGAACGTGGCAGGCCAGTGCCCAGAGCCTGGGGCTCCTGGC
TCAGACCAAGGAGCATCCCCCAGGGGGCATACGGCCTCTTGGGCAAGCAGGAGACGCAGGAGGTTGTTGT
CACCAAGGCTGGGGGGCAGAGAGAGCCTGGCACCAGCCACAGCATGCTCTGTCTCCTGTCTCCCACGTGC
ATCCAGGCCCTGCCTCAGCCCTGTTCCCGGGGCACTGGCCATTGCTGGGTGACTGCGATCCACTAGTCTC
AGGCCAGAAGGGTGCCACCCACAGGTGGGCACGCCTCTGAGACAACCGTGGGCCTGGAGTACCCATTAGC
ATTCCCTTTCACTCTCCGAAATGCCCCAGTTGGTAAACCCCACAGCCACCTCCCTCCTGAGTTTCTGGGG
GTGATGTGCAGAGCAGATGTCTGAAGCCCATCATTATTATTTCTCCTCCTCCCTCTGAGCAATACAGTCT
CCGGCTCCCTGGCTCCCGGGAAAGGGTCACCCATGCCCAGGGTGTTACATGTCCCTGGAGGCGAGAGGCC
CGCTGCCCAGGAGGAAAGGGAGGCCTCCCCCTCCGGCTCCTGCTGCCTCTGCCGTCCCATGACCAGAACT
CTGCCGTCCCCTGTGACCAGAACTCTGCCAATGGCCCCATGAAGGACACACTGTTCTGTGAAAACTCCCC
GCCGGGCTCCCAGTTCTCAGCCGTGACCCCACGAGACGATTGCTGTGTTCCCCGTGAACCTGGAGTTCTG
GCTGCACTAACCTTCCTGGGAGTTCCTCCACGTGGCGTATCGGCCTGTCTTCCCCGCCACCTCCCCTTGT
CCGTGTCCAGACCTTCTGCTTCTTAAGTCTGCACTCCAGGACTGCTCCCCGGGTGCCTTCCTGGTCGGCC
CCCCTCCCCATCCCTGGGAGGAGCACACCCCATCCTTAGAAAGACAGGTCCAGCCACGCGGTGGGTTGGC
TGACAGCGGCTGCCTTGCAGGTGAAATTGCACTGTGGTCCTTGGTGGTCCTGGCCATCGAGCGGTACGTG
GTGGTGTGCAAGCCCATGAGCAACTTCCGCTTCGGGGAGAACCACGCCATCATGGGCGTCGCCTTCACCT
GGGTCATGGCTCTGGCCTGTGCCGCGCCCCCCCTCGTCGGCTGGTCCAGGTAACGGCCCTCACCAGGAGG
GGAGGAGGGTCTCCGGGGTGCTTCCTAGGGTCCTCCGGCCGGGGCGGGGGTAGTGCTGCCTGGTTTCAGG
CCCCCTGAGCCGGCAGCTGTCATAGGGTTGAGGTTTAGGGCAGGGAAGAGAGGGTCAGCCCCTAACGTCA
CTACGGGGCTGCTCCCTGCCCTGTGTCAAGGAGACTCCAAGACACCCCGACCCTTCACCTTGGCTGTGCC
CCTAATCCCCAACTAAGCCAGGCCAGATTCCAATCCTCTTTGGTCCAGTGCCCTGGGAGCGGCTCCTCTG
ACCTCAGGCCTCTGCCCCGGCAGAGGCAGAGCCTCCCTCATGCAGGTGTGGGCGTGTGGCCCTGGGAACC
AGTCCTGGCAAGACTCTCGGCTGATATCCCCCAACGGGCTGAGATGAGATGGCGGTGGGGTGGAACGTGG
TTTGGGAAATTGGCCTCTTTGGGTTCCCAGAGGCTTCGTGCCCTTCTGCTTCCAGGAAACTGCCATCTCT
CTCCCCTTTCCTCCTCTCTCAGTCTTCCTGGGGCCAGTGTTTTCCCTCCTGAGCAATTTAGCAAGGGGCA
AAAAACCCCGCCCCTCCTTCCCTATCTTCTCCAGTCTGGCCTAGTTATATCCTCATAGACGCAGCTAATG
AACATTGGGTTTCCTGAGGTCAGTTCAGTGTCACCGTCCTCTGAAATCACACACCCTAACCACACGCCCC
AGGGCCTCTTGTTTCCAGAAACTGTGCAAAAATCCCTTAATTACTCTGAGTGGCCTAGAAAGACCTGGGT
GCCTCCAATACAGATCATTGGGACCTTTTCCCTTCCCCCCACCTACCTCATGGTCCAAGGCCTGGCCTCC
GGCCACTTGGGAGTGGCAGGCTGGGTGAAGAAGCGCCAGGCAGGGAAGCAGGGGTGCAGACTAGGGGCGC
TGGGAGTGAGAGACGGGGAGAGACCAGGGTCCCAGGGTAACACGGCACTGAGCAAGGCAACAACACTGTT
TCCACACACCTGAATCCCTTATCTCAGTAGATGTGAGCCTCACAGCCAAGGAAAGGTTTATTATCCCCCT
TTTACAGAGAGGGGAAGTGAGGCCCAGAGTGAGAGCAGCCCCGCGCAGGTGCTGGCAGGGGGCTCTGGTC
AGCTGGGCCTGTTCCCCGGTCCCTCACGTGTGGGTCTCCCTCTGCCCCTCCTGCCCCGGCCCCTCCCCGG
TCCTCAGGTACATCCCGGAGGGCATGCAGTGCTCGTGCGGGATTGACTACTACACGCCCCACGAGGAGAC
CAACAATGAGTCGTTCGTCATCTACATGTTCGTGGTCCACTTCATCATCCCCCTGATTGTCATATTCTTC
TGCTACGGGCAGCTGGTGTTCACCGTCAAGGAGGTAGGGTCCTTGGGGGACCAGTGCTGTGGGGCTGGGG
ACAAGAGCGCTGATGAGGCTGAGTGCGGCCCCCAGCCCAGAGGAGCCTCAAGTCTGGACACCAGGCCCTG

TGTCCCCACAGGCGGCTGCCCAGCAGCAGGAGTCGGCCACCACTCAGAAGGCCGAGAAGGAGGTCACCCG
CATGGTGATCATCATGGTCATCGCTTTCCTAATCTGCTGGCTGCCCTACGCTGGGGTGGCGTTCTACATC
TTCACCCATCAGGGCTCTGACTTTGGCCCCATCTTCATGACCATCCCGGCTTTCTTTGCCAAGACTTCTG
CCGTCTACAACCCCGTCATCTACATCATGATGAACAAGCAGGTGCCTGCTGGTGGGGTGGGAAGGGGCCA
GGCCCCCCCCGGGCGACAGGTGGAGAAGCCGCAGTTTTAACTGGGCCTCCGTCTTTCCACCTGCAAAATG
GGCAGGGGGAGTTGGTTTTCCCTGGGGTAATCATAAGTCATCTGGGAGAAATGCAGATTCCTGGACAACC
CCCAGACCTTCTGATTAGAAGCTCAAGGTGGGCCCAGGAACATGCATTTCTAACAAGCCCTCTGATACTG
GCTCAGGAAAGAGAAGTGCCAGTCTGGATGGTTCTGGAGGCTGGCTTTAACGGTCCAGATGGTCAAAGTC
CCAGGCCTGGGAACAGGTGCCAGTCTCCACAAACTGGACAGGATGCCAAAAAGTCTCGTTCTGAGCGATG
AATGGATGAAGCGGTCCTTTTAACATATAGACCAGTGGTTCCTCTGCAGGTTCTTTGGTCCAGTGGGGAA
AACCTGGAGTCAGACAGATTGGGTTCAAATCCCAGCTCTGCTAGGTTTCAGCTGTGTGGCCTTGGGCAAG
TCACTTCCCTTTTCTGGGCTTCAGTTTCTTCATCCACGGAAAGGACGAAATCCTGAACTCTTGGGTTCAA
TGAGACAATTCCCAGACGGCCCTTGGCACACTGAGGGCATCACAGAGCATCACCAGTGACAAGGCCCCTT
CGGGTTTGGTCCTAGCACCTCTGGGTGGGGTTGGGGAGGCTTAGTAAGTTCCTCCAGGGAGCCATCTCAC
CGGGGAGCGGAGGCTGGGAGGGCCAGAGGCAGAAGAGGGAGGTGGCGCACCGCACTGACGATGCCATTTC
CCACCCAGACTCTGCGGGACCCTGACCACCCCTCACCCTTACCCTACCTCTTCCTTCCAGTTCCGGAACT
GCATGGTCACCACTCTCTGCTGTGGCAAGAACCCGCTGGGTGACGACGAGGCCTCCACCACCGTCTCCAA
GACAGAGACCAGCCAGGTGGCGCCTGCCTAAGCCCCTCCAGGGACTCCGTGGCCAGCTGCAGGAGTCCCT
CAGCCCCCACCCCACCCCAGCCTCAGCAGCTCCATCAGGAGCCGCGCCTGTCGGAACCAGCTCTCACAGG
CTCCCTGAGTGTAAACACAAAGACCAACCAACCAAATGCAAAAGAATCAACGAGAGAAACAGGAGGCGCC
TCACGTGGCAGGGGCAGCCCGATCTGGAGTCCTGATTTCCCGGGGGCCCGCTGTAGATCCACTCCCCCCA
GCTCATCTCTCAGCTACACAAGAGCTCTTGCTCTGGAAAAGTGTCCCAGCTTAGGGATAAGTGAGTAGCA
CATGACGGGGCATGCCGTAGGTGCTTATTAATAAATGCTAGGTGGAGGAAAGAAGGAATGAATGGAGAGA
TGAACGGGTCGGGAGGGCATAGGCATCCTCTTACAACATGTTAGCAGCAGCAGCAGCAGCTCGCCCTTGG
CTCATGACCTTGAGCAGCTGTTTTGTCCTTGGGCCTCACTTTCTTCCCCCATACAATGGGAATTCCAAAT
CTCTCCTCACACGGGCTGCTGGGAAGATCAAATGAGATTGTGTGTGTGTGCGTGCGTGCGTGCTCGCTTG
TGTGAGCTCTTTGTAAATAGTAAGGAGCTGGACAGACTGTAGTTAACATTATGAATAATATCAAGTAATA
TAAGTAATTCATCTCCTATGATCATCTCCTCTTGATAGCGACCACTTTGAGACTGGGCAAGGCTCTAAGC
ATCCAGCCTCGTCAGGCTTATAAACATTAGACAGATGGCAAGGTCAGACCAGCGCCGGGTGGTGGGCCAC
AGGGAAGGACGGTCAAGGAAATGCAGAGTGCAGGCATCAGGCCTGAGAAGAAAACAAAAACCAAAAAAAC
AACATCAGAGGACCAGAGTCTGGGGCCAGTGCAGAGCCCCCATGACGCGGGCCACTCCCTCCCAGTGCAA
CCCCCAGAGAGACAGGTCTTGCTCTCGGCATCTGAAAAACCACTAGCTCTCCTGCCCAGCACCCAGGCTG
CAGTATCTCTGGGCCCGTATGGAGCTTCTAGAAGTTATGTTTACCTGCCCACATTTAACGAAGAGCTGGG
TCCCCAACATCACCTTTGTCTCAAAAAGAGCTTAAAAAACAAAAGCGTGGGAAATCCGGCTGGACCCACC
TTCCCCCTGGGAAGTTCACAGATCACAGATTTTAGCTCCCTTGCTGGGCAAGCCTTCAGCGGCTCCAGTC
CATTCTCCACTCCGGAGAGTCCTTGCTGCTGAGAGGCTGGCTGGGACTCTAGGACATCAGAATCGAGCCG
CCTCATAACTGCCCCTCCTCCACTACATAACCAAAGCGGGAAGCTCTACCTCTCCCCAGCTCTGCCTGGA
GACGAAGGCAAATTGGGGTATTAAAAGCT

Homo Sapiens

>NG_009115.1:5001-11706 Homo sapiens rhodopsin (RHO), RefSeqGene on chromosome 3

AGAGTCATCCAGCTGGAGCCCTGAGTGGCTGAGCTCAGGCCTTCGCAGCATTCTTGGGTGGGAGCAGCCA
CGGGTCAGCCACAAGGGCCACAGCCATGAATGGCACAGAAGGCCCTAACTTCTACGTGCCCTTCTCCAAT
GCGACGGGTGTGGTACGCAGCCCCTTCGAGTACCCACAGTACTACCTGGCTGAGCCATGGCAGTTCTCCA
TGCTGGCCGCCTACATGTTTCTGCTGATCGTGCTGGGCTTCCCCATCAACTTCCTCACGCTCTACGTCAC
CGTCCAGCACAAGAAGCTGCGCACGCCTCTCAACTACATCCTGCTCAACCTAGCCGTGGCTGACCTCTTC
ATGGTCCTAGGTGGCTTCACCAGCACCCTCTACACCTCTCTGCATGGATACTTCGTCTTCGGGCCCACAG
GATGCAATTTGGAGGGCTTCTTTGCCACCCTGGGCGGTATGAGCCGGGTGTGGGTGGGGTGTGCAGGAGC
CCGGGAGCATGGAGGGGTCTGGGAGAGTCCCGGGCTTGGCGGTGGTGGCTGAGAGGCCTTCTCCCTTCTC
CTGTCCTGTCAATGTTATCCAAAGCCCTCATATATTCAGTCAACAAACACCATTCATGGTGATAGCCGGG
CTGCTGTTTGTGCAGGGCTGGCACTGAACACTGCCTTGATCTTATTTGGAGCAATATGCGCTTGTCTAAT
TTCACAGCAAGAAAACTGAGCTGAGGCTCAAAGAAGTCAAGCGCCCTGCTGGGGCGTCACACAGGGACGG
GTGCAGAGTTGAGTTGGAAGCCCGCATCTATCTCGGGCCATGTTTGCAGCACCAAGCCTCTGTTTCCCTT
GGAGCAGCTGTGCTGAGTCAGACCCAGGCTGGGCACTGAGGGAGAGCTGGGCAAGCCAGACCCCTCCTCT
CTGGGGGCCCAAGCTCAGGGTGGGAAGTGGATTTTCCATTCTCCAGTCATTGGGTCTTCCCTGTGCTGGG
CAATGGGCTCGGTCCCCTCTGGCATCCTCTGCCTCCCCTCTCAGCCCCTGTCCTCAGGTGCCCCTCCAGC
CTCCCTGCCGCGTTCCAAGTCTCCTGGTGTTGAGAACCGCAAGCAGCCGCTCTGAAGCAGTTCCTTTTTG
CTTTAGAATAATGTCTTGCATTTAACAGGAAAACAGATGGGGTGCTGCAGGGATAACAGATCCCACTTAA
CAGAGAGGAAAACTGAGGCAGGGAGAGGGGAAGAGACTCATTTAGGGATGTGGCCAGGCAGCAACAAGAG
CCTAGGTCTCCTGGCTGTGATCCAGGAATATCTCTGCTGAGATGCAGGAGGAGACGCTAGAAGCAGCCAT
TGCAAAGCTGGGTGACGGGGAGAGCTTACCGCCAGCCACAAGCGTCTCTCTGCCAGCCTTGCCCTGTCTC
CCCCATGTCCAGGCTGCTGCCTCGGTCCCATTCTCAGGGAATCTCTGGCCATTGTTGGGTGTTTGTTGCA
TTCAATAATCACAGATCACTCAGTTCTGGCCAGAAGGTGGGTGTGCCACTTACGGGTGGTTGTTCTCTGC
AGGGTCAGTCCCAGTTTACAAATATTGTCCCTTTCACTGTTAGGAATGTCCCAGTTTGGTTGATTAACTA
TATGGCCACTCTCCCTATGGAACTTCATGGGGTGGTGAGCAGGACAGATGTCTGAATTCCATCATTTCCT
TCTTCTTCCTCTGGGCAAAACATTGCACATTGCTTCATGGCTCCTAGGAGAGGCCCCCACATGTCCGGGT
TATTTCATTTCCCGAGAAGGGAGAGGGAGGAAGGACTGCCAATTCTGGGTTTCCACCACCTCTGCATTCC
TTCCCAACAAGGAACTCTGCCCCACATTAGGATGCATTCTTCTGCTAAACACACACACACACACACACAC
ACACAACACACACACACACACACACACACACACACACACACAAAACTCCCTACCGGGTTCCCAGTTCAATCC
TGACCCCCTGATCTGATTCGTGTCCCTTATGGGCCCAGAGCGCTAAGCAAATAACTTCCCCCATTCCCTG
GAATTTCTTTGCCCAGCTCTCCTCAGCGTGTGGTCCCTCTGCCCCTTCCCCCTCCTCCCAGCACCAAGCT
CTCTCCTTCCCCAAGGCCTCCTCAAATCCCTCTCCCACTCCTGGTTGCCTTCCTAGCTACCCTCTCCCTG
TCTAGGGGGGAGTGCACCCTCCTTAGGCAGTGGGGTCTGTGCTGACCGCCTGCTGACTGCCTTGCAGGTG
AAATTGCCCTGTGGTCCTTGGTGGTCCTGGCCATCGAGCGGTACGTGGTGGTGTGTAAGCCCATGAGCAA
CTTCCGCTTCGGGGAGAACCATGCCATCATGGGCGTTGCCTTCACCTGGGTCATGGCGCTGGCCTGCGCC
GCACCCCCACTCGCCGGCTGGTCCAGGTAATGGCACTGAGCAGAAGGGAAGAAGCTCCGGGGGCTCTTTG
TAGGGTCCTCCAGTCAGGACTCAAACCCAGTAGTGTCTGGTTCCAGGCACTGACCTTGTATGTCTCCTGG
CCCAAATGCCCACTCAGGGTAGGGGTGTAGGGCAGAAGAAGAAACAGACTCTAATGTTGCTACAAGGGCT
GGTCCCATCTCCTGAGCCCCATGTCAAACAGAATCCAAGACATCCCAACCCTTCACCTTGGCTGTGCCCC
TAATCCTCAACTAAGCTAGGCGCAAATTCCAATCCTCTTTGGTCTAGTACCCCGGGGGCAGCCCCCTCTA
ACCTTGGGCCTCAGCAGCAGGGGAGGCCACACCTTCCTAGTGCAGGTGGCCATATTGTGGCCCCTTGGAA
CTGGGTCCCACTCAGCCTCTAGGCGATTGTCTCCTAATGGGGCTGAGATGAGACACAGTGGGGACAGTGG
TTTGGACAATAGGACTGGTGACTCTGGTCCCCAGAGGCCTCATGTCCCTCTGTCTCCAGAAAATTCCCAC
TCTCACTTCCCTTTCCTCCTCAGTCTTGCTAGGGTCCATTTCTTACCCCTTGCTGAATTTGAGCCCACCC
CCTGGACTTTTTCCCCATCTTCTCCAATCTGGCCTAGTTCTATCCTCTGGAAGCAGAGCCGCTGGACGCT
CTGGGTTTCCTGAGGCCCGTCCACTGTCACCAATATCAGGAACCATTGCCACGTCCTAATGACGTGCGCT
GGAAGCCTCTAGTTTCCAGAAGCTGCACAAAGATCCCTTAGATACTCTGTGTGTCCATCTTTGGCCTGGA
AAATACTCTCACCCTGGGGCTAGGAAGACCTCGGTTTGTACAAACTTCCTCAAATGCAGAGCCTGAGGGC
TCTCCCCACCTCCTCACCAACCCTCTGCGTGGCATAGCCCTAGCCTCAGCGGGCAGTGGATGCTGGGGCT
GGGCATGCAGGGAGAGGCTGGGTGGTGTCATCTGGTAACGCAGCCACCAAACAATGAAGCGACACTGATT
CCACAAGGTGCATCTGCATCCCCATCTGATCCATTCCATCCTGTCACCCAGCCATGCAGACGTTTATGAT
CCCCTTTTCCAGGGAGGGAATGTGAAGCCCCAGAAAGGGCCAGCGCTCGGCAGCCACCTTGGCTGTTCCC
AAGTCCCTCACAGGCAGGGTCTCCCTACCTGCCTGTCCTCAGGTACATCCCCGAGGGCCTGCAGTGCTCG
TGTGGAATCGACTACTACACGCTCAAGCCGGAGGTCAACAACGAGTCTTTTGTCATCTACATGTTCGTGG
TCCACTTCACCATCCCCATGATTATCATCTTTTTCTGCTATGGGCAGCTCGTCTTCACCGTCAAGGAGGT
ACGGGCCGGGGGGTGGGCGGCCTCACGGCTCTGAGGGTCCAGCCCCCAGCATGCATCTGCGGCTCCTGCT

CCCTGGAGGAGCCATGGTCTGGACCCGGGTCCCGTGTCCTGCAGGCCGCTGCCCAGCAGCAGGAGTCAGC
CACCACACAGAAGGCAGAGAAGGAGGTCACCCGCATGGTCATCATCATGGTCATCGCTTTCCTGATCTGC
TGGGTGCCCTACGCCAGCGTGGCATTCTACATCTTCACCCACCAGGGCTCCAACTTCGGTCCCATCTTCA
TGACCATCCCAGCGTTCTTTGCCAAGAGCGCCGCCATCTACAACCCTGTCATCTATATCATGATGAACAA
GCAGGTGCCTACTGCGGGTGGGAGGGCCCCAGTGCCCCAGGCCACAGGCGCTGCCTGCCAAGGACAAGCT
ACTTCCCAGGGCAGGGGAGGGGGCTCCATCAGGGTTACTGGCAGCAGTCTTGGGTCAGCAGTCCCAATGG
GGAGTGTGTGAGAAATGCAGATTCCTGGCCCCACTCAGAACTGCTGAATCTCAGGGTGGGCCCAGGAACC
TGCATTTCCAGCAAGCCCTCCACAGGTGGCTCAGATGCTCACTCAGGTGGGAGAAGCTCCAGTCAGCTAG
TTCTGGAAGCCCAATGTCAAAGTCAGAAGGACCCAAGTCGGGAATGGGATGGGCCAGTCTCCATAAAGCT
GAATAAGGAGCTAAAAAGTCTTATTCTGAGGGGTAAAGGGGTAAAGGGTTCCTCGGAGAGGTACCTCCGA
GGGGTAAACAGTTGGGTAAACAGTCTCTGAAGTCAGCTCTGCCATTTTCTAGCTGTATGGCCCTGGGCAA
GTCAATTTCCTTCTCTGTGCTTTGGTTTCCTCATCCATAGAAAGGTAGAAAGGGCAAAACACCAAACTCT
TGGATTACAAGAGATAATTTACAGAACACCCTTGGCACACAGAGGGCACCATGAAATGTCACGGGTGACA
CAGCCCCCTTGTGCTCAGTCCCTGGCATCTCTAGGGGTGAGGAGCGTCTGCCTAGCAGGTTCCCTCCAGG
AAGCTGGATTTGAGTGGATGGGGCGCTGGAATCGTGAGGGGCAGAAGCAGGCAAAGGGTCGGGGCGAACC
TCACTAACGTGCCAGTTCCAAGCACACTGTGGGCAGCCCTGGCCCTGACTCAAGCCTCTTGCCTTCCAGT
TCCGGAACTGCATGCTCACCACCATCTGCTGCGGCAAGAACCCACTGGGTGACGATGAGGCCTCTGCTAC
CGTGTCCAAGACGGAGACGAGCCAGGTGGCCCCGGCCTAAGACCTGCCTAGGACTCTGTGGCCGACTATA
GGCGTCTCCCATCCCCTACACCTTCCCCCAGCCACAGCCATCCCACCAGGAGCAGCGCCTGTGCAGAATG
AACGAAGTCACATAGGCTCCTTAATTTTTTTTTTTTTTTTAAGAAATAATTAATGAGGCTCCTCACTCAC
CTGGGACAGCCTGAGAAGGGACATCCACCAAGACCTACTGATCTGGAGTCCCACGTTCCCCAAGGCCAGC
GGGATGTGTGCCCCTCCTCCTCCCAACTCATCTTTCAGGAACACGAGGATTCTTGCTTTCTGGAAAAGTG
TCCCAGCTTAGGGATAAGTGTCTAGCACAGAATGGGGCACACAGTAGGTGCTTAATAAATGCTGGATGGA
TGCAGGAAGGAATGGAGGAATGAATGGGAAGGGAGAACATATCTATCCTCTCAGACCCTCGCAGCAGCAG
CAACTCATACTTGGCTAATGATATGGAGCAGTTGTTTTTCCCTCCCTGGGCCTCACTTTCTTCTCCTATA
AAATGGAAATCCCAGATCCCTGGTCCTGCCGACACGCAGCTACTGAGAAGACCAAAAGAGGTGTGTGTGT
GTCTATGTGTGTGTTTCAGCACTTTGTAAATAGCAAGAAGCTGTACAGATTCTAGTTAATGTTGTGAATA
ACATCAATTAATGTAACTAGTTAATTACTATGATTATCACCTCCTGATAGTGAACATTTTGAGATTGGGC
ATTCAGATGATGGGGTTTCACCCAACCTTGGGGCAGGTTTTTAAAAATTAGCTAGGCATCAAGGCCAGAC
CAGGGCTGGGGGTTGGGCTGTAGGCAGGGACAGTCACAGGAATGCAGAATGCAGTCATCAGACCTGAAAA
AACAACACTGGGGGAGGGGGACGGTGAAGGCCAAGTTCCCAATGAGGGTGAGATTGGGCCTGGGGTCTCA
CCCCTAGTGTGGGGCCCCAGGTCCCGTGCCTCCCCTTCCCAATGTGGCCTATGGAGAGACAGGCCTTTCT
CTCAGCCTCTGGAAGCCACCTGCTCTTTTGCTCTAGCACCTGGGTCCCAGCATCTAGAGCATGGAGCCTC
TAGAAGCCATGCTCACCCGCCCACATTTAATTAACAGCTGAGTCCCTGATGTCATCCTTATCTCGAAGAG
CTTAGAAACAAAGAGTGGGAAATTCCACTGGGCCTACCTTCCTTGGGGATGTTCATGGGCCCCAGTTTCC
AGTTTCCCTTGCCAGACAAGCCCATCTTCAGCAGTTGCTAGTCCATTCTCCATTCTGGAGAATCTGCTCC
AAAAAGCTGGCCACATCTCTGAGGTGTCAGAATTAAGCTGCCTCAGTAACTGCTCCCCCTTCTCCATATA
AGCAAAGCCAGAAGCTCTAGCTTTACCCAGCTCTGCCTGGAGACTAAGGCAAATTGGGCCATTAAAAGCT
CAGCTCCTATGTTGGTATTAACGGTGGTGGGTTTTGTTGCTTTCACACTCTATCCACAGGATAGATTGAA
ACTGCCAGCTTCCACCTGATCCCTGACCCTGGGATGGCTGGATTGAGCAATGAGCAGAGCCAAGCAGCAC
AGAGTCCCCTGGGGCTAGAGGTGGAGGAGGCAGTCCTGGGAATGGGAAAAACCCCA

Rattus Norvegicus

>NC_086022.1:150653205-150658367 Rattus norvegicus strain BN/NHsdMcwi chromosome 4, GRCr8, whole genome shotgun sequence

GGAGCCGTAGGTAGCTGAGCTCGCCAGGCAGCCTTGGTCTCTGTCTACGAACAGCCCGTGGGGCAGCCTC
AAGGGCCGCAGCCATGAACGGCACAGAGGGCCCCAATTTTTATGTGCCCTTCTCCAACATCACGGGCGTG
GTGCGCAGCCCCTTTGAGCAGCCGCAGTACTACCTGGCGGAGCCATGGCAGTTCTCCATGCTGGCAGCCT
ACATGTTCCTGCTCATCGTGCTGGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACCGTACAGCACAA
GAAGCTGCGCACACCACTCAACTACATCCTGCTCAACTTGGCTGTGGCTGACCTCTTCATGGTCTTCGGA
GGATTCACCACCACCCTCTACACCTCACTGCATGGCTACTTTGTCTTTGGGCCCACAGGCTGCAACCTTG
AGGGCTTCTTTGCCACCCTTGGAGGTATGAGCAGAGGGACTGGGGTATAGCATAGGAGCCAAGGGGGTGT
GAAAGGACCTGGGGAGGTTCTGCAGCTTGGAAGCAGCAGCTTAATGGGTCCCTGTAATCGGTATCATCTA
AAGGCTTAGCTTGTTCATTGACAAACACTGTGACCCCAAGCTCGGCTGTTGTTGAAAGCAGGCACTGAAC
GTTCGTTCATCTATCTTGTTCTTGAGTAATACAAGAAACGTGGGTTCAGATAGGCCAAGGTCTCACTGAG
GAGTCCTGTGTGGGGGTGTCCTCTGAGGCAGCTGAGCTGGAGCAGACACAGACTGAGCACCAGAAGTGAG
CTAGAGAAGACACATAGGTCTAGATCCTTCAGGACTGTCCCTGGTCTGGGAAAGAATCACACATCTAACT
GCCTGGCCAGCCCTGTCAGCTTCTGCCAGAGTGCATGCTCCATACACCCGGAACCTTCTGCCAGAGTGCA
TGCTCCATACACCCGGAACCTTCTGCCAGAGTGCATGCTCCATACACCCGGAACCTCAAGTGATTCATCT
GTTTCTTTCCTTTTTCTATCTTGGAGTGGGGCACAGTCTCACGCAGTCCAGTACAGACTGGCCTTAAATT
ATGCAGCTGAGGATGTACTTGAACTTGTGATCCTCCTGCCTCAGCTTCTCAAGTGTTGTGATCCTAGTCT
CGGACCACTATGTTACGCCAGGTGTTTCTAAACATTTCCTCTCACTCAACTGGAGAATCATGAGGCTATC
TCGGGGAGCTCTGGGGCCTGTTTAGCTGAGGGACCTGAGGTAGGGAGCAGGCAAAAGTCATGGTTAGAGA
TACTGAAGGGCCAGGACCAGAGCCAGGGTCTCCTGGCTAGGACTTAGAGATGTTTCCAGAGGATGTAGGA
GGAAACAGGAGAAGTGGGTGTAACAAAGCCCAAAGCCAGAGTGACCAGTGGGTCTAGCTTGCATGAGTCC
CAGGTGCCCAGGGTACTGCCTTGGTAACACTGTTGGACATCTCTGTTACCTTCTGTGATCACAGTCCCCC
AGCCTCTGGACAGAAGCTGGGGTGCTGTGCTGGTGAGCTTGTCTCTGTGGGGTCAGGCCCAGGCCGAATC
TGCCATCCGGATTCTTGTCGGTAGCATTCCCATTATTCAGAAGTTTGTTATGTGGTCCTTCCTCACACTG
GGCTTCTGAGGGTGACATGTGGACTAGTATCTGGAGCTCCCTCTTCACCCTCTTCTTCCTCTGCCAAAAC
GCTAGCCAGGGTGTGGCCCTAAGCCACAGCTCCAGTCACTCTACGGTGGTCTCTCTCATGAGCCTAAAAT
TCTAACAAACAGAAGAGCTTCTGGTTCTGTTCCTTTGCTCACTTCCTCTGGCACACAGGTTCTTCACTCC
CTCCCTCCCTCTTGGCCAGCCCAAACTCACTGCAATCCCTAAGGCCTGGTACAAGTCTCAAACCAGAAGC
ACCCATGCCCCCCTGTCCTCTCTGTGGTGTTTGTTCTCTGGCTTGAGGTCAGAGCTGGAGGACTAATAGC
TTCTAACTGCCTTACAGGTGAAATCGGCCTGTGGTCCCTGGTAGTCCTGGCCATTGAGCGCTACGTGGTG
GTCTGCAAGCCCATGAGCAACTTCCGCTTTGGGGAGAATCATGCCATTATGGGTGTGGCCTTCACCTGGG
TCATGGCGTTGGCCTGTGCTGCTCCCCCACTGGTTGGCTGGTCCAGGTAATAGCACTGAGTATTGGGTCT
AGCAAGGTCTTTGTGGGGTTTCCATTTAGAACACAGAGCCCTCGAATTGGTTCCAGGCAAAATGTAACAT
GGTCTTGCCCCCTAAAATCACTCTGGTCACTCTCCCAGGCTATGATCTAAGGCAGGGAGAAGAGAGGGAC
TGTAGTAGGCCAATGAGTTTGATTCTATTTCTGAGCCCCATAGCAGGGAGAACGCTGAACATCCCAACCC
TTCACCTTGGCCAAGTCCCTAATCCTCAGCTAAGCCAAGGCCGAAGTACAATCCTCTTTGGTTGAGTTTG
GGTATGGGCAGCTCTCTCTCTCTCTGACCTTGGACCTTGGCCCCTGGAGAAGCTGAACCTTTCCAATATG
CCTGGTGACATTGTAGCCCCAGAAACTGGTTCTCATCTAGCTTCCAGGCCACCATATCTAAATGAGACAA
GAGAGGGTGGGGTCCGTGGTTTGGGCACTTGGACAGGCTATGTGATGCACAAAGCCTCAGAGAATCTCCA
TTCTCTGCTCACATCTCCTCCCCATCCCAGGAGCTCACCCAGTGGCCCTGATTGAGTCAGAGCCCCTCAC
CGTTCACCTCTCACTGGCCTCTTCCCCTACCTTCACTCACTTGGCTTGGCAGGCCTCTACAGACACACTC
AATGGACACTCAGGTTTCTGAGTGCAGCCCAGTGTCTCTGTCCTCAGATATCATCACGACATCCTCGTTT
CTAGACGCTGCACAAGGTTCTGATAATCGCAGCAGGCCTACCCTTACTGTAGAAATTATTGCTGTTACTA
GGAGACCCGCACGTCACACTGCCCCATTCACAGGGAAGGCCTCAGCTCCCCTCCCCAGCATCCTCTGCCT
ACTCATGTAACCACCAAAGGGCAGCAGGCTGGAGAGGAGAGCTGTGTGACTAAGTGACAGGGAGCTTGAG
AGTTGTCTGAGGGCAGAGAAGCTAAGTCTCACCTGGCGATGGGGCCAGCAGGTAATAACCATGCTTCCCT
AGGCCCACAGAAACTGTAGCCTCCAGGAACCCCACACTTATGTCCGGCTGGGCATGTGTTTTCTCCCTGC
TTTATCACCCTTAGGTACATCCCCGAGGGCATGCAGTGTTCATGTGGGATTGACTACTATACACTCAAGC
CTGAGGTCAACAATGAGTCCTTCGTCATCTACATGTTCGTGGTCCACTTCACCATCCCCATGATCGTCAT
CTTCTTCTGCTACGGGCAGCTGGTCTTCACCGTCAAGGAGGCATGAGTGGGGCCACCCTGGGGCTGGGTG
GCCAGAGCCGGGTGGGTGCCAGGGTTTGCATGGACCCCTCGGGCTAGACACAGGTCTGTCCCCCTGCAGG
CCGCCGCCCAGCAACAGGAGTCGGCTACCACTCAGAAGGCAGAGAAGGAAGTCACGCGCATGGTCATCAT
CATGGTCATCTTCTTCCTGATCTGCTGGCTTCCCTATGCCAGTGTGGCCATGTACATCTTTACCCACCAG
GGCTCCAACTTCGGCCCCATCTTCATGACCCTTCCCGCTTTCTTTGCTAAGACCGCCTCCATCTACAACC
CAATCATCTACATCATGATGAACAAGCAGGTGCTGCCTGGGTCGAGGCAGGGCTTGTGGAGAGGGAGGGA

GAGAATGGAAGGGGAGGGGAGGGCAGGGAAGGCGGTCCACTCAGACTGCTGTCAGGCCATGATCTCTCAG
GCTGGTGATCCCCCCGTCTCATGGAGTAAGTCCTCTGGGTGACCTGCCATCCTGTCCTGTGAGATACACC
TGACCAGATGGTTCTGGAAGTCAGCTTTAGAAGTCAGCTAGAAGCCAGGTGCAATCGCCCATGTTTGTAA
TCTTAATCCTGAGGCAGTAGGATCTTGAGCTCCAGGTCAGCCTGGGCTAGATAGTGGATGTGTGTCCCCC
TCGCCCAAAGCAGGCTGTGAGCATACTGCTGTATCTCCGTGCTCAGGATGCTGAAGTGGGCAGATTAGAA
ATTCAAAGCTATCTTTGGCAATACAGTGATTTGGGGGCCAACCTGGGCTACATGACAGTCTGTCTTAAGA
AGTAACCAGGAAATGTCAGGTAGTTCCAAGGCTGGGAATAGAATGGTCTCACTGTAAAGCTGTAGAAATT
GCTAGTTCTGGGAAGAACGGGATTAAGCCGCTGTTAAAAGTCACAGTTTCCCTGCAGAAAAGGATGTGGT
CTCTAGACCTAGACTCTGGGTTCCAGTTCTAGTTTTGCCACATGCAGGCTGTGTGACCTTGGGTAAGTCA
GATCTGGGCTTCAGTTTCCCTGTTTATTTATAGGAAATAAATCACAAATCACAAATTCTCAAATTAGATA
AGATCACAAGGTCCTACTCATCCACAGGACACATGGGATGTCATTTGACAACCCCCTCGTGCTGTGTTCC
TGGCATCTCTGGTTGAAGGGCAACATACATTTAGCACGCTCCCCCAGGGAGCCAGGCTTAGGGAGGGGAC
TTGCTGGAGGTGGGGTTGAGGGAGTGGAGTGGTAGGGCCCTGTCCTGACTGGTGCCTCTTGTCTTCCAGT
TCCGGAACTGCATGCTCACCACGCTCTGCTGCGGCAAGAATCCACTGGGAGATGATGAGGCCTCTGCCAC
TGCCTCCAAGACGGAGACCAGCCAGGTGGCTCCAGCCTAAGCCTGGCCAGAGACTGTGGCTGACTGTAGG
AGTCTCCTGTCCCCACTCACCCCAGCCACAGCCCCCACCAGGAGCAGCACCCGTTGGAATGAGGTCATGC
AGGCTCCCTCAGTGTTCTTTTCTTTGTTTTTAATGAATTCATGAAAGCAAAATGAGGCTCCCCACTCAAC
AGGGACAGCCTGACAAAGGACATCCATCCACCAAGACCCCCAGCCTGGAGTCCCCAATTCCCGGGGGCCA
GCGGGATCTGTACCCCTCCCCTCAGCTTGTGTCTCAGGAACATGACAAGTGTCCCGGCTTACGGCTAAGT
GTCTAGGACAGAATGGAACACATAGTAGCTGATTAATAAATGCTACCTGGATG

Canis Lupus Familiaris

>NC_051824.1:c5667219-5661948 Canis lupus familiaris isolate SID07034 breed Labrador retriever chromosome 20, ROS_Cfam_1.0, whole genome shotgun sequence

ATGAACGGGACGGAGGGCCCGAACTTCTACGTGCCCTTCTCCAACAAGACGGGTGTGGTGCGCAGCCCCT
TCGAGTACCCACAGTACTACCTGGCTGAGCCATGGCAGTTCTCCATGCTGGCTGCCTACATGTTTCTGCT
GATCGTGCTCGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACAGTCCAGCACAAGAAGCTGCGTACA
CCTCTCAACTACATCCTGCTCAACCTGGCTGTGGCTGACCTCTTCATGGTCTTCGGTGGCTTCACCACCA
CCCTCTACACCTCTCTGCATGGATACTTTGTCTTCGGGCCCACAGGATGCAATGTGGAGGGCTTCTTTGC
CACACTGGGCGGTATGAGCTGGGGTCTCAGTGGTGGGATGGGGCGGGGGGGATACGGGAGCCAGGAGGAG
TGGAGGGATCTGGAGAGACAGCCCGTACTTGGGGATGGTGTCTAAGAGGGCTGCTCCCCACTATGTTCAC
CAGCAGTGTCTACTTGATCAACACACACTGTTAGTGATGATAAGCTAGGCTGTTTATTGAGGGCAGGCAT
TGGACACTGTCGCTCTCTTCCTTTACATCAAGGAATCTGAGCATGAGAGAAGTCAATGGCCTTGCTGGGG
CCACACTGTGGTGGGGAGTTTCCACCCCACATCGCTCTGGCCCCTCGGGCCATGTTCTGTTTCCCTTGGA
GCACCTGTGCTGGTCAGACCCATGCCGGGCACTGGGGATAGGGGTGGACAGGTTGGATCCCTGAGCTCAG
GGCTCTCAGCCCAGGATGGCACACAGATGATCAGTTCTCCAGCCACTGGACTCTGCCTGTGTTGGGCAAT
GTGCTCAGTCTCTCCCCACTGGCATCCATCTGACCCTGCAGAGAAGGGTCTGTCTATATGTGGTACCCCT
GTCTCACCCCTGTCTCGTGGCCTGAAGCTGGGTGATCTGTGTTCATTGAGGGTGACAAACACCCAGTGAT
GGCTGGAGATTCCCTGGGAATGGGGCTGAGACAGCGCCCTGGACATGTGAAGCAAAGAGAAGACAAGGCG
ACAGAGCAGTCCTTTGGCTGATGCTAGGCTCTGCAGCCACCCCGGGCTCTCTCCTGCTTGCCTGAGAGGC
TGTGTGTCCCAGAGAAGGGGGGCCAGTCCTGGATCTGAGCCGGAAGACCCAGGCCCTGGTCACTGCCCTG
CCACATCCCTGAATGTGTTTCTTCCCTTCTCCTGGCCTCACTTTCCTCAGCTGCTAAACAGGATCTATTG
TCTCTCCAGCACCCTCATCACTTTTCCAAAGAAACTATTCGAAATCATCTTTTTTTTTCTTTTTAAAAGA
CTTTATTTATTTATTCATGAGAGACACAGAGAGAGGCAGAGGCAGAGGTAGAGGGAGAAGCAGGCTCCCT
GTGGGGAGATGATGTGGGACTCGATCCAGGACCCGGGATCACGCCCTGAACTGAAGGCAGATGCTCAAGC
ACTGAGCCACCCAGGCGTCCCTCGAAAGCATCTTTCAAAGCTACAGATCACCACACAATGTAATGCCTTC
CTATGGAAGGAGTTTCTTCAGAGGGGAAGAACTTCCCCACACAAAAAGGCTGGAAGACAGGGATGAGAAG
GTACCATGTACAGGTGGGCACTTCCATGCAAGGTTGGCACCAGTTTACAATTATTATTTTGGAGTAATAA
TTATTAGCGTTCACTTTGTCTCTCAGAAACATCCTGGTTTGGTTGATAGAGTCTATGGCCAACCTCCCCA
TTGAGTTTTGGGGTAATGTTTGAATACCCCCATTCTTTTTTTTTTAAGATTTTATTTATTTATTCATGAGA
GACACAGAGGGAGAGAGGCAGAGACACAGGCAGAGGAAGAAGCAGGCTCCATGCAGGGAGCCCAATGTGG
GACTCAATCCCCAGACCCTAGGATCACAACCTGAGTCAAAGGCAGATGCTCTACTGCTGAACCACCCAGG
CACCCCCAAATTTCCCCATTCTTTTCTGCTTCTTCCTCTGGGCAAATGATTCCCCAGCTTCCTGGCTCTG
AGATGCGGGACCCATAGACCCAGGTTATTTCATTCCCCAAGTGGAAGAGGCCACTGCTTAAGAGGGAGGG
AGGATGTCCAACTCCAACAGGCACTCTGCCTGTCACCCCGGTCTACTCCGCACATTCTCCTTCGCAGACT
GGTTCTTCACCCCTCTTCCCAGAGTCCAAGCCATCTCCATCCCAAGTCCTGGCCCCAGCCCTGCCCCAGG
CTGCCTTCCTGGCCGCCCTCTCCCACCCAGGAGTGCTCCCTCCTTAGGCAGTGGGGTCCAGGTAGGTGGT
GTGTTGACTGATCAGTCCCTGACTGCCTTGCAGGTGAAATTGCCCTGTGGTCTTTGGTGGTCCTGGCCAT
TGAGCGGTACGTGGTGGTGTGTAAGCCCATGAGCAACTTCCGTTTTGGGGAGAACCATGCCATCATGGGC
GTCGCCTTCACCTGGGTCATGGCACTGGCCTGTGCAGCACCCCCCCTCGCTGGCTGGTCCAGGTAATGGC
ACTGAGCAAAAGAGAAGGGTCCCCGTCCCCGGGGGGGAGGTCTCTGTAGGGTCCCTCACCCAGGACTCAA
ACCTGGTGCTGTCTGGTTCTGGGCATCGAGCTTATATGTCCCCTACTCTAAACGGCCACCCTGACAGCTC
TCCCAAGGGAGGAGTTTAGGGCAAGGGAAGAGAGAATCAGACCCTAATGTTGCTATGGGGGCTGGTCCCA
TCTCCTGAGCCCCCATGTCAAGGAGAATCCAAGACGCCCCAACACTTCACCTTGGCTGTGCCCCTAATCC
TCAACTAAGCCAGGGCCAGATTCCAATCCTCTTTGCCCCATAGGCAGTTCCCTCTGACCTTGGGCCTCAG
CACCCAGGGAGGGCGAGCCTGCCTAGTGCAGGTGGTGACATTGTAGCTGCTGGGCTGGGAACTAGGTCCT
GTCCAGCCTCTAGTCCATCATTCCCAAATGGGGCTCAGATGGGAGATAGGAGGACAGTGGTTTGGGAAAC
TGGACTGGTGACCCTGTGGGTTCCTGGAGGCCTGGTGTCCCTCTGGTTCCAGGAAATCTCTCTTCCCCTC
CCTCCTCTCTCAGCCTGCAAGGTCAATTTTTGTTCCTGTTGAATCTGAGCCGACCCCCTCCAGACTCTTT
CCCTATGTTTTCCAGTCCTGCCCAGTCCCATCCACACAGGCACAGCCAATGAACACCATTGTCATCATCC
TCTGAAATGACTGAAACATCCTGACCTCTTGTTTCTAGGAAATGTGCAAAGATCCCTTAGTTACTCTGTG
TGCCCATCTTTGGCTTAGAAAATACTTATACCCTGTTAGTAAGAACTTGGTTTGTACGAACTGCCTCCGA
TACAGAATTTGGGAGTTTTTCCTTCTCTCACCAACCTCTGCCTTGCAGAGCCTGAGGCCTAGTCTCTGGC
CATTGGGAGCAGCGTGTCTGGTGAGGAAACACAACGCAGGTCAGCAGTGTATAGGCTCTGCTAGGTGAGA
GACTGGGCCATCTTGTGATACCACAGCCTCCGTACAACCAAAGCACATTGTTTTCACAAAGGGCATTTGA
ATCTCTCATCTCCGTTGATTTACTCCTCACAGTCATGTAGCCAAGCAGATATTTTATCATACCCATTTTA
CAGAGAGGGAAAGCAGGCACAGAGCAAGACCAGCCACACAGCAGGTGTGTTGGCAGAGCCAGGGCTCTGG
TCGACTGCAGCCTGTTCCCAGGTCCTTCACGCGTGGGTCTCCCTTACACCCTCTCCTGTCTCACTCCCCT

CTGGTGCTCAGGTACATCCCAGAGGGCATGCAGTGCTCATGTGGGATCGACTACTACACACTCAAGCCAG
AAATCAACAATGAGTCCTTCGTCATCTACATGTTCGTGGTCCACTTCGCCATCCCCATGATTGTCATATT
CTTCTGCTATGGACAGCTCGTCTTCACAGTCAAGGAGGTATGATCCTTGTGCTGGGTGCTGGGGACACAT
GTGCTGGTTGGGTTGAGCCCGGCTCCTGTCCCAAAGGAGTCTGGATAGCAGGCCCTATATCCTTGCAGGC
AGCTGCCCAGCAGCAGGAATCGGCCACCACCCAGAAGGCTGAAAAGGAGGTCACCCGCATGGTCATCATC
ATGGTCATCGCTTTCCTGATCTGCTGGGTGCCCTATGCCAGTGTGGCATTCTACATCTTCACCCACCAGG
GCTCCGACTTTGGCCCCATCTTCATGACCCTCCCAGCGTTCTTCGCCAAGTCCTCCTCCATCTACAACCC
TGTCATCTATATCATGATGAACAAGCAGGTGCCTGCTGGCGGGACAGGCGGGTCCAGGGGCCCCAGGCTT
CAGGCACTGCCTGTGGAGGACAAGCCGTGTCCTCAGTCATTCCACTGGCAAAACCAGGCAGGGAAACTGG
CATCCCCCAGGGCATCGGTCATATGGGAGAAATGCAGATTCCTGCTGAATCAGAGCTGAATCAGAAGCTC
GCGGTAGGCCCAGGAATTTGCATTTCTAACAAGCCCTCCAGGTGTCTCTGAGACTGGCTCAAGGATGAGA
TGCGCCAGGCCAGATGGTTCTGGAGGCCCACTTTAAAAGTCAGATAGACTAAGTCCTAAGCCTGGGAATG
GGATGCCATTTTCCACAAAGCTGAACAAGGAGCTAAGTCTTAATCTGAGGGATGAAGGGATAAAGTAGTT
CTTTAACATCAACCAGTGACTTCTCTGCAGAATACATGATCCAGTGGGGAAAACATGGTCTCTGGAGCTA
GGCATATCAGGTTCAAATCTCAGTTCTTATTTTCTAGCTTTGTGACCCTTGGGCAAGTCACTTCCCTTCT
CTGGCCTTCAGTGCCTTCATGCCTAGAGAGGGCAAAATCCCAAACTCTAGGGCTAAATAAGATACTTACA
GACAGCCCTTGGCACACAGAGGGCATCACGGAATGTCAGCAGTAGCAACACCCCCTTGGGTTCAGTCCCT
GGCATCTCTGGGCGGGGGGGCCACATGTGCTTTACTAAGTTCCCTCCAGGAAGCCAGGCTTGAGAGGGCA
GTGGAACCCTGTGAGTGCCAGAAGCAGGGAAGGGGTTGGAGGCAAATTTTGCCAACCACCCCAGTTTGCT
ACACACACTTTTAGTGGACCCTGACCCTGACTCATATCCCTTGCCTTCCAGTTCCGGAACTGCATGATCA
CCACCCTCTGCTGTGGCAAGAACCCACTGGGTGACGACGAGGCCTCTGCCAGCGCCTCCAAGACGGAGAC
CAGCCAGGTGGCACCGGCCTAA

Sus Scrofa

>NC_010455.5:68908578-68913651 Sus scrofa isolate TJ Tabasco breed Duroc chromosome 13, Sscrofa11.1, whole genome shotgun sequence

ATGAATGGGACGGAGGGCCCAAACTTCTACGTGCCTTTCTCCAACAAGACGGGCGTGGTGCGCAGCCCCT
TTGAGTATCCGCAGTACTACCTGGCTGAGCCATGGCAGTTCTCCATGCTGGCTGCCTACATGTTCATGCT
GATTGTGCTTGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACGGTCCAGCACAAGAAGCTGCGCACA
CCCCTCAACTACATCCTTCTCAACCTGGCAGTGGCTGACCTCTTCATGGTCTTCGGAGGCTTCACCACCA
CCCTCTACACCTCTCTGCATGGATACTTTGTCTTCGGACCCACAGGATGCAACTTGGAGGGATTCTTTGC
CACCCTGGGCGGTATGAGCTGGGATGCCATGGGGGGGGGGGGCAGGGGGAAAAGGAGCCAGGAGCATGACA
GGAATCTGGGCACAGCCCCAGCCTTAGGGGTAGTGGCTGACAGGCCATTATCCAAAGCCCTCAATCAACA
AACACTTCAGTGATCTGAGCCAGGCTGCCATTTGTTGAGGGTGGGACAAGTCAAGGGCCTTGCTAGGGTC
ACATCGTGGCAACAGCAAAGCTGAGTTTCAAGTCTCTGTAGCCCCTCAGGCCATGTTCCCTTTCTCCCCG
GAGGAGCTGTGTGGGGTCAGACCCATGCCAGGCACAAGGATAGAGCTGGGCAGGAGAGACCCCTGCATGG
GACTCCCCTCCTGGGCAGGACGAGGCTTCCCAGTCCTCCAGTCTAGACTTTGCCTGCACTGGGCGATGGG
CTCAGACCCTACCCCAGCATCTATCAGACTTGGTCACAGCCCACCTCCAGCCTGTCATGGTTGAATGCGG
AGCCATCCGTAGGGAGACTTTAGACCCGTGTGGTTATCTGTAGCTTCGGGTGGTACTTTATTTATTTGTC
TTTTTAGGTCCACACCAGAGGCATGTGGAAGTTCCCAGGCTAGGGGTAAAAATGGCTGTGGGCTTACACC
ACAGCCAGAGCAATGCCAGATTCGAGCTATGTTGGCAACCTACACTGCAGCTCATGGCAATGCCAGATCC
TTAACCCACTGAGGGAGCCAGGGATTGAACTGGCATCCTTATGGATACTAGTTGAGTTCATTACTACTGA
GCCACAATGGGAACTTTTGGGCAGTACTTTTAAAGTATTTTCTTTAATGGAAAAACTGAGTGCCTCAGAC
CCATTAAGTAGGTGAGAAAACTGGGGTGTGGAGAGAGGAAGACTCAGCTGATGATGTGGCAGGGCAGTGA
CCAGAGCCCTGGTCTACTGGCTTAGCTCCAGGAATGTCCCACTGGGGACACAAAGCCTGTTAGGCAAGCA
GGAGACTCGGGAGGTCGTTACTACAAAACGACCAGGATGATGGGAGAGCCTAGTGCCAGCCACAGGGATG
CTCTGCCTCCCGCATATATCCAGGATGTTGCCTCATCCCCATTCCCAGGGATTGTAGCCATCACTGGGTG
TTTGTCACCTTCAGTGACACACATCACCCAATCTCAGGCCAGAAGAGTGGCACATATAGGCAGGCACGCC
TCTGCCAAACTGCTGCCCTGGAATTCTCACTGGTGTTCCCTCTGACTCTCAGAAATGTCCCATTGTGGTT
GGCCAATGCTATGGCCACCTTCTCTCTTGAGTTTCTGGGGTTGGGGGCGGGGTGGGGGGTGTTGTTCAAG
GAAGGTGCCTGAATTCCATCATTTCTTACTTCTTCTCTGAGCAAAATTGTATCCAGCTTCCTGGCTCCTA
GGCAGGGGTCCCACATGCCCAGGTTGTTTCATTTCCCTGGAAGGGAGGCCTTCCAACCCCAGCTTCCATG
AAACAATGCCTCTGCTGTGCCCTTCAGATGTGCAGGGCACATTGCTCTATAAAAACTCCCTTTAGAGCTC
CCAGTCCAGCCATGACCCTGTGACCTGATTTTTGTGTCCCTCATGAACCCAGAGCTCTAAATTAACTTCC
TAGGACTTACTCTGGACCCCTGGGCCCCTCCACTCAAGGACCTTGCCTTTCTTACCATCCTCTCTCCATG
GAATAGGAGCTCTCTGTCCTTAAGCAGCTCCAGGCCTGGGGTGAGCTGACCAACAGCTGACTGCCTTACA
GGTGAAATCGCCCTGTGGTCCTTGGTGGTCCTGGCCATTGAACGGTACGTGGTGGTGTGTAAGCCTATGA
GCAACTTCCGCTTCGGGGAGAACCACGCCATCATGGGCCTGGCCCTCACCTGGGTCATGGCTCTGGCCTG
CGCTGCGCCCCCTCTCGTCGGCTGGTCCAGGTAATGGTACTGAGAAAGGAAGGCAGGGTCCCTGGTGCTC
TTCAAAGGGCCCTCCAGCCAGGCGGCATCTGGTTCTAGGCCCCGAGCTGGCAACTGTCATGGGGTTGAGG
TTTAGGGTGAGGAAGAGAGGGTTAGCCCCTAATGTTGCTATGGGGCTGGTGCCACCTTCTGAGTCCCCAT
GTCAAGGAGATTCCAAGACGCCCCAACTGTTCACCTTGGCTGTGCCCCTAATCCTCAACTAAGCCAGGCC
AGGTTCCAATCCTCTTTGGTCTAGTGCCTTCTGACCTTAGGTCTCAGCACCTGGGAAGGGCGAACATTCC
TTGGGCACGTATGACACTATAGCCCCTGGGAACTGGTCCCGTCCAGCTTCTAGGCCATCAGCTCTAAATG
GGACTGAGATTAAGAGGGGGGTTGGGCAGACAGTGGTTTGGGAAGGTGGGCTAGTGACACTGTGGATTTT
CCACTGCTTCCAGGAAACTCCCATCTCGCTCCCTGTTCTTCCTCTTGGTCTTTTCGGGGCTAATGTTTTG
TCCCTTGCTGAATTTGAGCCCATGAACTCCGGCCCCCTTCCCTGGCTCCTCCAGTCTCACCCAGTTACGT
CCTTGTAGGCACAGCTAACAGACATACGGATTTTCTGAGGTTGGTCCAGTCATTCTCCTCTGAAGTCACT
GAAATGTCCTAACCACACCCCCCTGGGGCCTCTTGTTTCCAGAAACTGTACAAAGATCCCTTAGTTACCC
TGTGGGCCCCTCTTTGGCCTAGAAAATGCTGTTACGGTTTTGTCAGTTAAGACCCGGGTTTGTACAAACT
GCCTCAAGTATAGAGCTTGGGAGTTTTTCCCTTGTCCCCACCAACCTCTGCCCTGCATGGCCCAGGGCCT
GGCCTCCAGCCACTGGGGGCCGTGGGCCTGGTGAAGATGCCATGCGAGCAGCGGGCAGTGGGCAGCGGGT
GAGCAGTGTGGGGCACTGGGAGGGAGAGACCGGAAAGATCGAGGTCTCACGGCACCAAACAAACAGTGAC
ACAACACTGTTTGCACGGGTGCATTTGAATCCCTCTCAGTTGATTTGACTCTCACAGTCACACAGCCAAG
GAGAGGGTTTCTCATCCCCATTCTACAGCGAGGCCCAGAGTGAGACCGGCCACAGAGCAGGTGGCCTGGC
AGAGCCCGGACTCTAGTCCTTGGGGCCTGTTCCCAAGTCCCTCGCATACACGTCTCCCTTTGCCCCCTGC
TGTGCCATGCCCTCAGGTACATCCCAGAGGGCCTGCAGTGCTCGTGCGGGATTGACTACTACACACTCAA
GCCGGAGGTCAACAATGAGTCCTTCGTCATCTACATGTTCGTGGTCCACTTCTCCATCCCCTTGGTCATC
ATCTTCTTCTGCTATGGGCAGCTGGTCTTCACAGTCAAGGAGGTATGGTTCCTCGCGGGGCACTGGGGAC
GTGTGCATTGATTGGGCGGAGCCAAGCCCCTGTCCCAGAGCAACCCCACTCTGGACACCTCACCCTGTGT

CCCCACAGGCTGCCGCCCAGCAGCAGGAGTCAGCCACCACACAGAAGGCCGAGAAGGAGGTCACTCGCAT
GGTCATCATCATGGTCGTGGCTTTCCTGATCTGCTGGCTGCCCTACGCCAGTGTGGCATTCTACATCTTC
ACCCACCAGGGCTCCGACTTTGGCCCCATCTTCATGACCATCCCAGCCTTCTTTGCCAAGAGCGCCTCCA
TCTACAACCCCGTCATCTATATCATGATGAACAAGCAGGTGCCTGCTGGTGGAGCGGGAGGGTCCAGGTC
CTCTAGGCCACGGGAGGACAAGCCTAATCCTTGACAGGGCTTCAGTCATCCCACCTGCAAAATGGGTAGA
GTTGATCTCCCCCCTCAGCATGGGAGTCATCTGGGAGAAATGCAGGTTCCTGGGCCCCACCTTGACCTGC
TGAATCAGAAGCTCAGGGTGGGCCCAGGAACCTGCATTTCTCACTAGCCCTTCAGATGACTCTGATACTG
GCTTGAGAGTGAGAAGTGCCAGTTCATATGGTTCTGGAGGCCTGCTTTAAAAGTCCAATAGTCAAAGTCT
TAAGCCTGGGAACAGGTGCCAGTCTCTGCAAAGCTGAAGAGAGAGCTAAAATGTCTTGAGCTGAAGGATG
AAGGATAAAGCAGTCCTTTAACAGAAACCAGTGGTCTCTCTGTAGAATCCAAAATCCAGAGAAGAAAACA
TGGAGGCAGACATTGGTTCAAATCCCAGTACTGCTAGTTTCTAGCTGTGTGATCTTGGGCAAGTAACTTC
CCTTCTCTGGGCTTCAGTTTCTTCACCCATAGAAAGGGTGAACCTTAAACTCCTGGGTTCCATGAGATAA
TTCACAGATGGCCCCTGGTATACCAAGGGCAGCATGGACAGTCACCAGTGATGGAGCTCCTCAGCTTTGG
TCCTGGCCCCTCCAGGTGGGGTTACGGGGGCTCAGTCCCTCCAGGGAGCCCTTTGAGAGGGGAGTGGAGG
CCAGAAGGGCCAGAAGCAGGAAAGGGGTGGAGGCACATCTCACCAGTTTGCCACCTCCCCTTTGGGGGCC
CTTGACCTTGACTCACGCCCTTCTTTCCAGTTCCGGAACTGCATGCTCACCACGCTCTGCTGTGGCAAGA
ACCCACTGGGTGATGACGAGGCCTCCACCACCACTTCCAAGACAGAGACCAGCCAGGTGGCACCAGCCTA
AGCCCCGCCAAGGACTCTGCGGCTCTGCGGCTCTGTAGGAGTCTCCCCACCCCTGCCCATCCCAGCCACA
GCCACCCCACCAGGAGCCGCACCTGTCAGAACCA

Xenopus Tropicalis

>NC_030680.2:131923381-131927328 Xenopus tropicalis strain Nigerian chromosome 4, UCB_Xtro_10.0, whole genome shotgun sequence

CAGCTTCAGCTGGGATCACAAGCTTCTAGGGATCCTTAAGGCAAAGGAGAAACACAGAAGGTATTCTTTC
TACACAGGAAAGGACATTTTAGAGCTGCTACCATGAACGGAACAGAAGGTCCAAATTTTTATATCCCCAT
GTCCAACAAAACTGGGGTGGTACGAAGCCCCTTCGATTACCCTCAGTATTACTTAGCAGAGCCATGGAAA
TATTCAGCACTGGCTGCTTACATGTTCCTGCTCATTCTGCTTGGGTTCCCCATCAACTTCATGACCTTGT
ACGTCACTATCCAGCACAAGAAACTCAGAACACCCCTAAACTACATCCTTCTGAACCTGGTATTTGCCAA
TCACTTCATGGTCCTGTGTGGGTTCACGGTGACGATGTACACCTCAATGCACGGCTACTTCATCTTTGGC
CAAACTGGTTGCTACATTGAAGGCTTCTTTGCTACACTTGGTGGTAAGTTACAGTGGGTTTTTTTATCAT
TGATATTATTGCAGAGCTAAATTTAGTAAATTCTTGGAAAGCGATGTAGATCTTTGTACTCCATCTTGCA
TAAGCAAAGGTGCAATGAAATGGATATAACGGTACAAAGAAATGGCACAAAATGCCTTTAGCAAGGGGGT
TAGTCTTCAATTCTTACTCTAAAGCAAGGATGGGGAGCCTGCAGCCTTCCAAACCATAAACTGCTATTAG
AAGTCCATGGGAGGTGGAAGTAATAATTTTAAACAACTGTACAGCCATAGATTTCCTGACCCACTTGTAG
AGGAACAAGCTACCAGGGAAAGGCCTATACTAGATTTCATCCTGCAGAATGCATTTTCCTAATGAACTCT
ATCCAGGGTAAAAGGCAATACTGAAGTGAGCATAGTGTATGCCAGGCTAGACAAGGTTCAACATATCAGA
CTGTGAGGGGGGCAAATGGCCTGTATTGAGTCATGTATTGAGTCATGTTAACCTTTTGCCTTTGTGTTCT
CTACTAACAGGTGAAATGGCCCTCTGGTCACTGGTAGTATTGGCCATTGAAAGATATGTGGTGGTCTGCA
AGCCCATGGCCAACTTCCGATTTGGGGAGAACCATGCTATCATGGGTGTAGTCTTCACATGGATCATGGC
TCTGTCCTGTGCTGCTCCTCCTCTCTTTGGATGGTCCAGGTAATTGTATATTAGGTAGAGGGAGCAAGTC
CCTAGAAAACATATCTATTCTCTATATAACTATATATAACTATAATGAAACCTGTAGTAACATCCACCAA
AATTACAGAATGAGCTAAGGAAGGTCACAATAAAGGATCAGCTAATGCAGCTGGTGCTCTGGGGGGCTCC
AAGCTTTGGATAGGAGCCCAGTTTAAGGTTAAGATTTGGGATATGTTGTTCACTGAAACTATAGAAGAAT
TATTTGCCCACATCTTACAGTGGCCATATAATAATAATATTGAGAATTGCTCAAATTCAGCCTTCTGCAC
CCCCACTACAGCCATGGGCTGCAAAATGTAGTTGAGCAAAATAACCACTGAAATGTTTCAAGATTTGGGG
GGCATTCCAACTAGAATTATTCTAACATTCAGATTAATTTGTGCTAATTCCCCAAGGACTCAGTTTATTG
CTGATAAAGAATGTTAGGGTTGAGGGATATAGGATGTCTGTGAAACCACCTGTACTGAGGGGTAAGAAAG
CACTTGCTTGCTGGTTCTGACACTATATTGTCCCCGTGCAGATACATCCCAGAGGGAATGCAGTGCTCAT
GCGGAGTAGACTACTACACACTGAAGCCTGAGGTCAACAATGAATCCTTTGTCGTCTACATGTTCATTGT
CCACTTCACCATCCCCCTGTGTGTCATTTTCTTCTGCTATGGTCGCCTGCTGTGCACTGTCAAGGAAGTA
AGTAAACATTGTCATGTGATCATGGTCAGAAGCCAATTCAGCTAGTTGTTGATAAAAGTTGTCCACACCT
AGACCCTCCAGATATTGCTGAACTGTTACTACTCTCTGGAACTCTACCTTACCTTATTGACTGGAGAGAT
GTGAATTAGTCAAAGCTAGGGTGGCACAGTTTACACATTCCTGTTCTAGATCATAAAGACTGCTCTACAG
AGAGTCCTACATCTATCTTACCCATTATCTCCTACTAGACTGTTTCTATTCTCTCCTAACTTTCTGTACC
CATTCAACAGGCTGCAGCCCAGCAACAGGAATCTGCTACAACCCAGAAGGCTGAGAAAGAGGTCACCAGA
ATGGTTGTTATGATGGTCATTTTCTTCCTGATCTGTTGGGTGCCCTATGCCTATGTGGCATTCTACATCT
TCACCCACCAGGGCTCTGACTTTGGCCCAGTCTTCATGACAGTCCCAGCTTTCTTTGCCAAGAGCTCTGC
TATATACAACCCTGTCATCTACATTGTCCTGAACAAACAGGTACTAAACTGCTTCCAAGCCTGTTCCTAT
TCTTTATCTGTAGTCTGTCCACTTATGAGTTGCCAAGAGTTCTGAACACAAGCTTCTGTTTAGCTATAAC
TCCCATCAGTCTTCAGCTACCAGCTAGGAATGATGGAAGTTTCAGTTCATCAAAAGCAAAGTGTACTCAA
GTGTACTCTCTATAGCTGTAGTTCCACGATGTCAGGGTGGATGCTTTGCTACTGATGATGATTGTGTTGC
CATGCACAACTGCCATGCCACTTGAAATAAGTTATTTTCTGTACTTTTATGTACTGATTTTGCTAATAGT
ACCCTGATGCTATTTCTAGATGACAGATCTTTTAACCTTTACATGCCTAAGTAAACATTTCCATACCTTA
CCATGGCAGTTTTAATGGTAGGGGCAGTAAAGGTATTTGCCTTATGTCCCAAAATGAGTGAGGCCCTTTG
GGGAGAAAAATACAGATAAAACTACAAATAACTTACAAAATTATTGTATAAGAGATGTTACATGCTTTCA
GTATTTTACATTGAAGAGCTATAGCCCCTGGACATCCCTGATTTATGTATAATTTATCTAACACCCCCTG
ATGGGGCCCCCTCTTCAGTAACATCAGTCCTTTATCTTAATGAAATCTCTATGCTTGTCTATTAGCATGA
ACTAAGGAATATAAGATTCTGTAGACATCAAGATCTATTACTTGTTTTAATTGCCTATTTTCATATGTTT
AATAGACTAATAGAGACTAATGGAGCACAACAATACAGAACATTCCCCAGTGTTCCATGTCTATAGTGAA
TGCAATGAGAGCCAATGCAATGGGCAAGGCAATGACTATGTTCTCCTTTCTCTCCCCAGTTCCGTAACTG
CTTGATCACCACCCTGTGCTGCGGAAAGAATCCATTCGGTGATGAAGAGGGATCCTCTGCAGCCAGCTCC
AAGACAGAAGCTTCTTCTGTCTCTTCCAGCCAGGTGTCTCCTGCATAAGAGCTTCACCCAAGGCTGTCTC
AGGGTCCGCTGCCTCACACAATTCCCATCACTTAAGCCCTGTCTACTTGTTGCGAAGGCAAAGAATTCCA
CAGTTTAATGTTTACCCCATTCTGCCCAACCTTGGAGACTGTAAGAGCTGACCCCTTTACTGCTGGGAAG
GCCCAAGCTTTGCTGTGTTCTGATGTGGTCCTTTCAGCAGAAAATGGGTTGATACCAATGAATTTGGCCA
AGGCTGTACATAAAGATACCATTAGTTTGGAGACACCTCCCACAAGGAGAATGCAATACTTCTATATCTG
TCTTTTTTCTTGGAGGTGACATATTGATGCTGCTTCTATTCATGGTCAGTAACAAAAAAGATCCATTTTA

CAATGTAACTGAAAGTTATGTTTTTTGTAATATAATAACATATTTCATGCAATCTCCTCTGCTTATTGGC
AAGGTCTGATATAGTGAGGATAGACAGCCAGACCCCTTGCATTAAAATCCTGTATTAAAAATTTCTTTGC
AAGTAAAAAAAAACTACAAAAAGTCAAA

Anolis Carolinensis

>NC_085842.1:58629719-58637880 Anolis carolinensis isolate JA03-04 chromosome 2, rAnoCar3.1.pri, whole genome shotgun sequence

ATGAATGGAACGGAAGGCCAAAATTTCTATGTTCCCATGTCCAACAAGACTGGTGTGGTTCGGAATCCCT
TTGAGTATCCTCAGTATTATTTGGCGGATCCTTGGCAGTTCTCTGCACTGGCGGCTTACATGTTTCTTCT
GATTCTCCTGGGATTCCCTATCAACTTCCTCACTCTCTTTGTCACCATCCAGCACAAGAAACTCAGGACA
CCCTTGAATTACATTCTTCTAAATCTTGCCGTAGCCAATCTCTTCATGGTCTTAATGGGCTTCACCACCA
CCATGTACACATCTATGAATGGATATTTTATTTTTGGGACAGTAGGATGCAACATTGAAGGCTTCTTTGC
CACTCTGGGAGGTAGGTGTCATTCTATTAAACATTAACTATTGGGGAAAAATACAAATGTAAGATCTGTG
TCTAGGGTCCTCAAAGTGTTACTTGAAATTCCAAACATTTTGAATATCTGGGGATCCTAGTAATGTTTTG
CTGTCCAGACCTCTTGAACTAATTTAGTAGCTTAAGCAGCACATTAATATAACTGAATGGGAACAAAGAC
TAAAATGTGATTGTTCCAATTAGGGTAAATAAACTAAATCAATACGGACTCAGTATGTCTACACCTAGGT
AAGTTCATTATGTAATGAGTTTCCAGTAGCAGCAACTATCAATTGAATTTAGGGGTATGCTGTCAAATGG
TTAAAATCAGGTTCATGCACAGTACAAAAATGTTCTTAATATATGGACTTTTTGCACCACAGTTCTTTAT
ACAGAGCTGTGATTATTCTCTGGTTCAGATGGAAGACTTTTGCAGAGCCTCAGGAGATATGACCTGCAAG
TTCTCACACCTTACTTGAAAAGGCAGGGATTTAATGAAGCTATTTTTTTTCTTCTACATGTCAGGCAGGA
ATGAAATTAAATTGTCATTAACAAAAAGCAGATGAAAACTTTTTCTGTGTTCAAGTCATTTTCAATCTCC
ATCTTTCAATCATTTTGATTATATGATGCTATCTTCTTAAAAAAAAACAACAACACCCTGGTTTATTCAC
TTGACATACAATCCTCAGGGCAGAGAAGACCTAAATCTGAAACCAAACAAACCCGCAAAAAGCAAACTAA
TGCCATCAAGTTGGCTCAGTTTCTTTCAATAGTCTCTTATCCATGACCAAGAAGGGCAAGAATCCAAGTA
TTATCCCTTTTACACTTGCTTCCATGCAACCCCCATTTGTTTTACTGTGGCTTGTAAAGAAACAAACTTC
TCTGAACCATCTGTTCCCAAAGTTGTTTGGCTAAAGGCAGACTGCAGAGAACATAAATCTTTCATCAAGA
CTCAAGAGTGACGTGACTCAAATACTTACCTGTCAAGTGTCCCTCCTTGAGAGGGGCACCCTGTTTTTCA
AGGACTGAAAAATGTGAGTAACAATCATAGGATAATAGAATATCTGTTATGAAAGGATCAAAACCAGTAT
AGTATGTGCTTAAAGCTAAAGCTCAGTGTAATGGCAATAGAGCAGTATGAGTAGTAAATGTGATGGGTTT
TTACCTTTAGCTTTACTTAGTTTTGATCCACTTAGCAGGGTTCTTAATTATAGTAGTTACCGTAAATGGT
AACAGCCCTGGGAGATGGTTTGGACATCTTTGCTGAAAACCAAAGCTCTGAAATAAAAGGAGTGAGGAAT
CAAGGGATAAAATCAAGAATTCAGATTTGCCTCAATCACATCACAAATAATACACAATTGAATAAGGAGT
CTATGTAATGAGCAAAAGATGTGTATGAGTCAGGAATTCTCAACTTTTGTCCCTAATTCACCTTCCTGTA
TATTGTCCAAAATACCACATTTTGGTCTTCCTTACTCCTTAGTTTGTATTTTGACCAAGAGAAAAGAAAA
TGGGACTGGCAAACAACTATGTTGGTTTTCTCAATGAATACTGAAAACCAATATAGAAATGTTGCAAGAG
ATTAGATGAATTCATAACAGACAAGACAAGAGTCCAGCGCCAACATCCCTTTGTTCTTAAATGGGATCCC
ATTCAACCCCACCCACCTTGCTTTCTGTACAGCTGAAGCTGCTCTTGGTTCAATTTCCAAGAGCACATGT
GGTTTGAACATCAACCATAAGGAAGTCAGGGAGGGGTCTGACCAGATGTAGAAACGCATAGACAATAGAC
TAGTAGACATTAGGAGCACATAGCAAAGCATAATATACTTGTGCCTTGAAAACAAGTTAGGAATGTCATT
CTGCCTGGCAGGACCTCTTTGGAGGCAAGGGCAAGGGACTTTCAGTACCAATTATCTTTTAAACTGAGAT
GCCAGGGATTAACTCTGGGACCTTCTCCATGGAAAGCATGTGTTGAATTACAACTAAATGGATTCTCACT
CCCCAAATATTCCTAATATTTGCTCTTGTCATTATTTAAAATAAAAACTGGCAGAAAGAAAGAAGAATCT
TTAAAAGAAGTGGCTCTTCTGTTTCTCTCTCATTCTCTGTTCCCTTTTTCAAGAATCCCACAATTGGAAA
ATGCTAAAATATTTTTTTTCTTTTGCTCTCTTCTAGGCGAGATGGGCCTATGGTCTCTGGTAGTGTTAGC
TGTGGAAAGATATGTGGTGATCTGCAAACCTATGAGCAACTTCCGTTTTGGTGAGACTCACGCCCTTATT
GGGGTGAGTTGCACTTGGATCATGGCCTTGGCCTGTGCTGGTCCTCCTCTCCTTGGATGGTCGAGGTAAG
TATGCATGAAATCTCTGGCGTGGATAATTCAAGAGTTGTAAGGGATGAAAAGGGAAATGCTATCAAGAAG
ACTTCTTAGCCATCTCTGACACTCAGAGGCAATTATAATGCCAGTGCACCAGACTGACATAGCAACCCCT
GGAGATACTTTTGGGCTGAGAGAATGATTTATAGGGTTGCTGGAGTAAAAAGTGGAAGGGTCTCTTGTTC
CTTAATGGTTGTGTATAAAAGGAATGTCGCAGGTGTTTCTTATCATTCAACCAGGTAACAAGCAACACTT
GATCAAACTCCTTCCTCTATACTCCTGTTAAAGGTACAGGTGCTCTCTCCACTTTTTATTCCTACCTTCT
TGGACAAGGTATACCCTCTGTTTTCCCTCAACAAAGGTTAATGTAATGCAGTGCCATGTATGCCCTGCTT
AAGGATGAAGCTCTGTAGTTTTGAGCAAGACTGGGAGAAAACTTTGAAAAGAGTAATATAGGATTATTAT
TTTTTAGAATTCCAGGGTTACATCTTGGGGCATGATGTAGGGCACCTGGTTTTGTAACTGATGTTATCCT
TATTTATTTTTAAATAAAACAATTATGCAACCCTTGTGAATCTTCAAGGATCTCAAGCTTCAAAAGAAAC
TAAATCGCAGTGAATCCTTCTCCTCATTCAGGGAAATAGAGTGTGCATTAACAATACCAATGCCTAAATC
CAACTATTAGTCCCAACTTGCTCAAATCTTTAGACCCACCGTATCAATGGGAATTTTGTAACACTAATGT
AAGTTCAGTAAATTCAGCAGGTGTACTGGAGCCACAGTGGTGCCATGAGTTAAACCTTGTGCCAGCTAGA
CTTCTGACCTAAAGGTTGCAGGTTCGAATCCATGAGATGGGGTGAGCTCCCGTCTGTCAGCTCTAGCATG
CAGGGACATGAGAGCAGCCTCCCAGCAGGATGGTAACACATCTGGGCACATCTGGCCATCCCCTGGGCAA
CATCTCTGTAGATGCCCAATTCTCTCACACCAGAAGCGTCTTGCACTTCTGACACGATAAAAAAGTGGGT

CTACTATAGTTGGTTTCAATGCTGCCACCATAGTGTGACTGCGCAGGCTACAATTCACCCACTGACATTT
TGGATTTAATTCTAGGTACATCCCAGAAGGCATGCAATGCTCATGTGGAGTTGATTATTATACACCAACC
CCTGAAGTCCACAACGAGTCCTTTGTCATCTACATGTTTTTGGTCCATTTTGTCACACCATTGACCATTA
TATTCTTCTGCTACGGACGCCTCGTCTGTACAGTGAAAGCGGTAAGTAACCATACAGAAAAGAGGTTACC
TGACGCAAACCAGAGTGAAAATAGGTAATCATTTTGCAATTTTTAGTCCTGTGAGAAGAGATTAAGCACC
AGAGATGTTAGGTAAATGTTAGGTAAAATCCTTTATAGCTTGGATCCACCTGTGAAACAATTAGAAGCTA
GCTCTTTATTTATCATAGAACAACCTCCTTGTCTCTCTGTGTTGTGTTCACAGATGAATGTGTGTTTCAG
TGGACATCGTCCCCCCCAGTATTTGTTTCAGTGGACATCACCCCATCACTGAGGAGGTTACACTGGTGCC
TTTCCTGTCATGGATTCATGAATACAACAGTAAAGTGTGTATAGTCTCTACGATGCTTTATAGTGCAGTG
CCCCAGGGCTTTATAGTTCAGTGCTCCTGCACTATAAAGCCCTGGTAGTCCAGAGAGTCCTTTCAGTGAT
GGGGGGGGAAAAAAGGAAGAAAATGCTTTCATTTCGTGACTGTGCTGGTTTTCAATGGCATGTTTCTTTT
GGTAATGCTTATGGCAAATGGGCCCCCAGAAAATGGTTGGAAAAGTTATATGTCCATTTCCCAAGCTGTA
CTGTTGCAGCATGCTTACAGCACACTGTTCTCATGCTTCTAGGCTGCAGCTCAGCAACAAGAGTCTGCAA
CCACGCAGAAAGCTGAGAGAGAAGTCACCCGCATGGTCGTCATCATGGTCATTTCCTTCCTGGTTTGCTG
GGTTCCTTATGCCAGCGTGGCGTTCTACATCTTCACCCACCAAGGATCTGACTTTGGCCCTGTCTTTATG
ACCATCCCAGCTTTCTTTGCCAAGAGCTCAGCCATCTACAATCCTGTGATTTACATCTTAATGAACAAAC
AGGTAACTTGGCAATGTGGCTTGGGCTTTTTTAAAAACAATATAATAACACTCAAGAGTTTATGGCACTT
TCCCTAAGTGCTTAAAGTGCTTCCTATATACATTTCCTTAATAATTCTTGTAACAAACCCTGTAGGTTAA
TCCTCTTTATTACAGATGCGTATGAGTGTGTCTGGGGAGGGGGGAATGGAGAGACAGAGACCCCCCTAAG
CGAATTCATTGCTGAGCAGAGACTTGAACCAGGCTCTCTCCATTCGTACACTAAAATTATCTTTACAGCA
TTTCGCTCCTTCCCAATTGTGCTCGGAATATAATGCATTTCTTGATGGGTGGTGGTAGTATTTAATCTGA
AAAATCCCTAATCACCTGTTTCAAGTCAAATGCTGTGGCGAGGGACCAAGAGAAGATGTTCTTGCAGTCT
CTCTGGGGGAGGATGCCTGCTCTCAGCTGGTTGCTAGAAAGCCTTCTCCCCACTTTCTTTTTATCAACAC
AGCAAGCTGCTAATGACTCTCGCCATTGGTGAACCATTCAGGGCAAGAGGACTAAGCCTAAGCACTTTTC
ACTGGGTGAATTATAGCATTATCAATTATTTCTCTGAGAACTGGGCTATGCCAAGGAATAAGCAAACAAT
CTCAGAGGCTTTTCACTTGCTTTGAAACACAGAACGCCTTTCCTATTTCAATGGAGTGGGAGTTGCAAAA
AATAATTCAAGTGTATTTATATGTGGAGGGAGGATTTGTGTAGCTCCTCTGCCATTTTTAGACTGCAATT
CACATGAGCCCTGGTCTGGCTAGCCAGAGGTGAAAAATGATAGGAGGTACCGTGTTCCCCCGCTACTTCA
TGGTTCGCTTATCACGTACTCGCTGTTTCACAGGAAATCTATCTATCATCTATCTATCTATCTATCTATC
TATCTATCTATCTATCTATCTATCTATCTATCTACAGTAGAGTCTCACTTATCCAACATAAACGGG
CCAGCAGAACGTTGGATAAGCGAATATGTTGGATAACAAGGAGAGATTAAGAAAAAGCCCATTAAACATC
AAAATAGGTTATGATTTTACAAATTAAGCACCAAAACATCGTGTTATACAACAAATTTGACAGAAAAAGT
AGTTCAATACGCAGTAATGCTATGTAGTAATTACTGTATTTACGAATTTAGCACCAAAATATCACTATAT
ATTGAAAACATTGACTACAAAAATGCGTTGGATAATCCAGAACATTGGATAAGCGAGTGTTGGATAAGTG
AGACTCTACTGTATCTATCTATCATGTATCTATTTATTTATTTACCCATCCCATTGCCACTTCTCCTCCT
CCTCCTCCTTGCTTCATGACTGCCCGGTTAGTGAGCGAGAGAGCAAGTGAGGGAGGGACGGTGGGAAAGT
GAGAAAGTGAGAGAGTGAAGGCGGGTGGCAGAAGAAGAGCCTGGAAGAGGTGGCCAGACTCCTGTTTCTG
CTGCCGCTCCAGCCGTCCATGTCGGGAAACGTGGAGGACTCAGAAGAGGGGGCAGAGGAGTCCTCCATGA
GTCCCTCCCCCCCTTCCATGTCCTCCACGTTTCCCGGTATGGCTGGCTGGAGCGGCGGCAGAAACAGGAG
CCTGGTCGCCTTTTCCAGGCTCCTCTTCTGCTGCTGCTGCCGCCCACCCTCACTCTCACTCTGTCATTTT
CTCAACCACCCTCCCTCCCTCGCTTACCGGGCGGAGCAGCGTTCCTTCTTCTCTGGCTGCAGGGGCAGAG
GCAGCCAGAACAAGGGGCCCATGGCTCTGGTAGGAAAGGCTTCACTCTCCCTGGGGCTTGCAAGGGGGAG
AAAGGCCACCTAACTATTAAAATAATGTTTAAATATTAAAATAAAAATAGTGTCCCTACTTCACGGATTT
TCACTTATCGTGGATGGTCCTGGAACATAACCCCCGCGATAAGTGAGGGAACACTGTATAGTCTAGGAGC
CCCTGATGGCACAGTGGGTTAAACCGCTGAGCTGCTGAACCCGCTGTTAGCTCCAGCTTCTGACAACCCA
GCAGTTCAAAAACATGCAAATGAGTAGATAAATAGGTTCCGCTCCAGTGGGAAGGTAATGGTGCTCCATG
CAGCCATGCCAGCCACATGACCTTGGAGGCGTCTATGGACAATGCCAGCTCTTTGGCTTAAAAATGGAGA
TGAGCATCAACCCCCAGAGTTGGACATGACAAGACTTCATGTTGGGAAAACCATTACCTTTTACCATATA
GTCTAAACACCTGGGGATAGTCACATGATACCCCTCTTGACTATAGGATTAGAAGAACAGCAGAGAAATA
ATAAATTGAAAGAAGTCTCAACAGCCATCCAGCCCAACTCCCTGCCATTTAGGAACACACAATCAAACCA
CTCTCAACAGGTGGCCAGTCTCTTTTTTGTTATTTCATAGAATCATAGAATCATAGAATAGTAGAGTTGG
AAGAGACCACATGGGCCATCTAGTCCAACCCCCTGCTAAGAAGCAGGAAATCGCATTCAAAGCACCCCCG
ACAGATGGCCATCCAGCCTCTGCTTAAAAGCCTCCAAGGAAGGAGCCTCCACCACAGCCCCGGGGAGAGA
GTTCCACTGTCGAACAGCTCTCACAGTGAGGAAGTTCTTCCTGATGTTCAGGTGGAATCTCCTTTCCTGT
AGTTTGAAGCCATTGTTCCGTGTCCTAGTCTGCAGGGCAGCAGAAAACAAGCTTGCTCCCTCTTCCCTAT
GACTTCCCTTCACATATTTGTACATGGCTATCATGTCTCCTCTCAGCCTTCTCTTCTGCAGGCTCTTCTG
CATTTTATGTGCTCTTGGTTGATGATGACCCTAAGGTGAATTTATTATTGGATGTTGGGGTTTTTGGGGG
CCTCTGAGGCTGGAAGAGTGTGACTTGACCAAGGTCACCCAGTGAGTTTCTATGGCTGAGTTGGGATTTG

AACCCTGGTCTCCAGAGTCCTAATCCAACACTCAAATCATTACACCATGCCGACTCTCTCAGCTCAGACT
TAGGAGAATAGTGGAGTCATTTTTCACATGTTAATGCTTGGATGCCCAGAATTTCTTAATGTGATTTCTA
CAGTAGGTTTCTAATGCTGAAGTGTTTACACATTGCTGCTGTTGGTTTTTCATTTACAGTTCCGTAACTG
TATGATCATGACCCTCTGTTGTGGAAAGAATCCTTTGGGTGATGAGGACACGTCTGCCGGCACAAAGACA
GAGACGTCCACAGTCTCTACAAGTCAGGTTTCTCCTGCCTGA

Tursiops Truncatus

>NC_047043.1:98342371-98347336 Tursiops truncatus isolate mTurTru1 chromosome 10, mTurTru1.mat.Y, whole genome shotgun sequence

ATGAACGGGACGGAGGGCCTGAACTTCTACGTGCCTTTCTCTAACAAGACAGGCGTGGTGCGCAGCCCCT
TCGAGTACCCGCAGTACTACCTGGCTGAGCCGTGGCAGTTCTCCGTGCTGGCTGCCTACATGTTCCTGCT
GATCGTGCTCGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACGGTCCAGCACAAGAAGCTGCGCACG
CCTCTCAACTACATCCTGCTCAACCTGGCCGTGGCCAACCTCTTCATGGTCTTCGGTGGCTTCACCACCA
CCCTCTACACCTCTCTGCACGCGTACTTCGTCTTCGGGCCCACGGGATGCAATCTGGAGGGCTTCTTTGC
CACCCTGGGCGGTATGAGCTGGGGTGCGGGTGACGGGGGCTACAGGAGCCGGGAGCTTGCGGCGTGAGGG
GGCCAGTGTCTGGGGACAGCCTATGCCTTGGGGATGGTGGCTGAGAGGCCATTATCCAAAGCCCTCACTT
AATCAACAAACACTTTAGTGATGATGAGCTAGGCTGCCGTTTGTCGAGGGTGGGCACTGAACACTGTTGA
TCTCACTTGGAGTGGGGTCATTGTCTTGCTTTCCAGCAAGGAAACAGATGAGAGAAGTCAAGGGCCTTGC
TGGGGTCACATCAAGTGTCTGGCGGGGCTGAGTTTCAAGCCCATGTCTCTGAGGCCCTTCAGGACATATT
CTGCTTCCCTCGCAGCAGCTGTGCTGGGTCAGACCCACGCCGGGCACTGGGGATAGAGCTGGACAAGACA
GATCCCTGTGTTCAGGGCTCCCAGCCTGGGGCGGGAGGAGGGCTCTGAGTCCTCCAGTCACTGACTGCCT
GTACTGGGCGATGGGCTCGGTCCTTCTCCAACATCTAGCTGACTCCCTCCCAGCCCACCTCCAGCCTCTC
TGCCATGCTTGAATGCTTTCTGCGTTGATGAGTCCATTTACAGGGAGACGTTAGACCTGTGAGGTGATCT
GTGTAGCTCTGAACCATAGTTTAAAATACTTTCTTTAACTGAAAAACTGATTCTCTGCAGAGAATAGATC
CCATTTAGCAGATGAGAAAACTGCAGTGTGCAGAGGGGAAGAGTGACTCAGGGATATGGCAGGGCAGTGA
CCAGGACCTAGGTCTCCTGGCTCAGATCGAGGAACGTTCTCTGGGGACACATGGCCTCTCAGGCAAGCAG
GAGACACGAGAGGTCATTATTACAAAGCCAGGGTGACAGGGAGAGCCTAGAACCAGCCACAAGGACGCTC
TGCCTCCTGTCTTCTCTCTCCCACCTGTGTCCAGGCTGCTGCCTCCGCCCCATTCCTGGGACTCTGGCCA
TCACTGGGTGTTTGTCACCTTCAGTGACCACAGTCACACAGTCTCAGGCCAGAAGGGTGCCACACACAGG
CGGACTCGTCTCTGCTACAACTATGGTCCTGGAATACTCACTAGTGTTCCCTTTCACTCAGAAATGTCCT
AGTTTGGTTGATAATTCCTATGGCCACCCTCCCTCCTGAGTTTCTGGGGTGATATGCAGGGCAGATGTCT
GAATCACATCATTATTTCCTCCTCCTTTCTCTGAGCAAAACATTATGCAGTTCCTTGGCTCCTAGGAGAG
GGTCCCACATAACTCATGTTGTTACATTTCCCTGGAGGGGAGAGGCCGCTGCCCAGGAGGGAGGGAAGGC
TTCCCAACTCCAGGCTTCTGCTGCCTCTGCAATATCTTTTGACAGGAACTCTGCCTGTTGCCCCATGAAG
GACACATTTTTCTATAAAAACTTCCTACAGGGCTCCCGGTCCAGCCATGACCCCGTGACCCGATTTCTGT
GTCCCTCAAGAACCCAGAGCCCTTGAGCTGAACTAACCTTCCTGGGAGTTACTCTGCGCGGCATATAGGC
CCCTCTGCCCCGCACCCGCTCTTCAATGTCCAGGCCCTCCGCAACCTAAGGCCTTGCTCCAGGCCCGCCC
CCAGGTGCTTTCCTGACTGCCCTCACCCCATCCCTCAGGGGAGCTCCCCCTCCTTAGACAGGTCCAGCCA
CGTGGTGTGTTGACTGACAGCTGGCTACCTTGCAGGTGAAATTGCCCTGTGGTCCTTGGTGGTCCTGGCC
ATCGAGAGGTACGTGGTGGTGTGTAAGCCCATGAGCAACTTCCGCTTCGGGGAGAACCATGCCATCATGG
GCCTCGCCCTCACCTGGATCATGGCAATGGCCTGTGCCGCGCCCCCCCTCGTCGGCTGGTCCAGGTAACA
TCACCGAGTGGAAGGGAAGGAAGGGTCTCCAGGGCTCTTTGTAGGGTCCTCCAGCCAGGGGGGCTGTCTG
GTTCCAGGTCCCGAGCTGGCAGCTGTCATGGGGTTGAGGTTTAGGGCAGGGAAGAGAGGGTCAGCCCCTG
ACACTGCTATGGGGCTGGTCCCCATGTCAAGGGGACTCCAAGACGCCCCAACCCTTCACCTTGGCTGTGC
CCCTAATCCGCAACTAAGCCAGGGCCAGATTCCAATCCTCTTTGGTCCAGCGCCCTGTTGAGCAGTTCCT
CTGACCTTAGGCCTCAGCACCTGGGGAGGCAGAGCCTTCCTCGTGCAGGTGTGACATTGTAGCCTCTGGG
AAGCAGTCCTGTCCAGACTCTAGGCTGTTATCTCCAAATGGGCTGAGATGAGCTGGGGTTGCGGTGGACA
GTGGTTCCGGACATTGGACTAGTGACTCTGTAGGCGGCCTCGTGTCCCTCTGCTTCCGGGAAACTCCCAT
CTCTCTCCACTTTCCTCCTCTCTCAGTCTTCCTGGGGCCAGTGTTCTTTGCCCCGTGCTGAATTTGAGCA
ATTCAGCAAGGGACAAACAACTCTGGTCCCCTTCCCTGTCTTCTCCAGTCTGGCCCGGTTACATCCTGGT
AGGCACAGCTAACAGACACTGGGTTTTCCGAGGTTGGTCCAGTGTCACCATCGTCTGAAATCACCCAAAC
ATCTTAACCAGATGCCCCGGGGCCTCTTGTTTCCAGAAAGTGCAAAGATCCCTTAGTTACCCTGTGTACC
CCTCTTTGGCCTAGAAAGACCTGGGCGCCTCAAATACAGAGCTTGGCAGGGCTTTTCCCTTCTCCCCACC
AACCTGTGCCCTGTGTGGCCCAAGGCCTGGCCTCCGGCTGCTGGGGAGTGGCAGGCTGGGAGGGGCGGGG
CAGAGCGGCGCGGTGGTGGGCACAGGGTTGGGGGCGTGCCTCTGGAATGAGAGACTTGGAGAGACTGTGG
TCCCGGGATAACACGGCGCTGAACGAACAGTGAAACAACACTGTTTCCACAGGTACATTTGAATCGCTTA
CCTCAGTCAATGTGATCCTCAGTCACACAACCAAGGAGAGGTTTATTATCCCCATTTTACAGAGAGGGAA
AGTGAGGCCCAGAGTGAGACCAGCCCTACAGTAGGCGGTGGCAGGGGACTCTGGTCAGCTGGGCCTGTTC
CCAAGTCCCTCACATGTGGGTCTCCCTTTGCCCCTCCCGCCCCATCTCCCCACCGGTCCTCAGGTACATC
CCAGAGGGAATGCAGTGCTCGTGCGGGATTGACTACTACACGCTCTCGCCAGAGGTCAACAATGAGTCCT
TCGTCATCTACATGTTCGTGGTCCACTTCACCATCCCCCTGGTCATCATATTCTTCTGCTACGGGCAGCT
GGTCTTCACAGTCAAGGAGGTATGGTCCTATGCTGGGCGCTGGGGACACGCACATTGACTGGGCTGAGCC
CAGCCCCCGTCCCAGAGGAGCCTCAGTCTGAACACCAGGCCCTGTTTCCCCGCAGGCAGCTGCCCAACAG

CAGGAGTCGGCCACCACGCAGAAGGCCGAGAAGGAGGTCACTCGCATGGTCATCATCATGGTCGTTGCTT
TCCTGATCTGCTGGGTGCCCTATGCCAGCGTGGCGTTCTACATTTTCACCCACCAGGGCTCCGACTTTGG
CCCCATCTTCATGACCATCCCGTCATTCTTTGCCAAGAGTTCCTCCATCTACAACCCCGTCATCTACATC
ATGATGAACAAGCAGGTGCCTGCTGGTGAGGCGGGAGGGTCCAGGTCCCCCAAGGCCACAAGAGGACGAG
CCACATTCTTGACTGGGCCCTCGGTCTTTCCACCTGCAAAATGGTCAGGGAGTTGGTCTTCCCCGGGGTG
TCAGAGTCATCTGGGAGAAATTCAGACTCCTGGGCCAACCCCCAGACCTTCTGATTAGAGGCTCAGGGTG
GGCCCAGGAACCTGCATTTCTAGCAAGCCCTCCAGGTGGCTCTGATGCTGGCTCAAGAATGAGAAGCACC
CATCCAGATGGTTTCGGAGGCCTGCTTTAAAGGTCAAACGGTCAAAGTCCCAAGCCTGGGAATAGGTGAC
AGTTTCCGCACAGCTGGACAGGGAGCTAAAAAGTCTTGTTCCAAGGAATGAAAGGATAAAGCGGTCCTTT
AACACAGACCAGTGGTTCCTCTGCGGATCCCTTGATCCAGTGGGGAAAACATGGAGTCAGACATATTGGG
TTCAAATCCCAGCTCTGCTAGTTTCTAGCTGTGTGACCTTGGGCAAGTCACTTCCCTTCTTTGGGCATCA
GTTTCTTCATCCATAGGAAGGGTGAACTCCTAAACTCTTGGGTTAAATGAGATAATTTACAGATAGCCCT
TGGCACACAGAAGGCATCATGGATTACCAGTGACAAAGCCCCCTGAGGTTTGGTCCTGGCATTTCCGGGT
GGGGTCGTGAAGGCTTAGTAAGTTCCTACAGGGAGCCATTTGAGAGGGGAGTGGAGGCTGGGAAGGCCAG
AAGCGGGACGGGGGTGGAGGCAAATCTCACCGACCATGCCGGTTGCCACCCACATTTTGGGGGACCCTGA
CACTGACTCATGCCCTTTCTTCCAGTTCCGGAACTGCATGCTCACCACCCTGTGCTGTGGCAGGAACCCA
CTGGGTGACGATGAGGCCTCCACCACTGCCTCCAAGACAGAGACCAGCCAGGTGGCGCCTGCCTAA

Cavia Porcellus

>NW_026947510.1:5075401-5081185 Cavia porcellus strain 051 isolate PalLab524CR breed Dunkin Hartley unplaced genomic scaffold, mCavPor4.1 scaffold_27, whole genome shotgun sequence

GGAGCCCCGAGCTGCACAGGCTGCGCTGTCCTTCTTGGGTGGAGCCGCCGCGCCTGCGGGGCAGACCAGA
CCGCAGCCATGAATGGCACGGAGGGCGAAAACTTCTACATACCCTTCTCCAATGCCACAGGCGTGGTGCG
CAGCCCCTTCGAGTACCCGCAGTACTACCTGGCTGAGCCCTGGCAGTTCTCCATTCTGGCCGCCTACATG
TTCATGCTCATCGTGTTGGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACTGTGCAGCACAAGAAGC
TGCGCACACCGCTCAACTACATCCTGCTCAACCTGGCCGTGGCCAACCTCTTCATGGTCTTAGGTGGCTT
CACCACCACCCTCTACACCTCCATGAATGGATACTTCGTCTTCGGGCCCACAGGCTGCAACTTGGAGGGC
TTCTTTGCCACTCTGGGTGGTAGGTGTGGGTGTTGGATGGCCGGGGTGGGGGGGTCCAGGGAGTGTGGTG
GGCATGAGACAGATACAGGGAGGCTTCCCTTCAAGCCTTCTCTCCTGTCATTAGCCAAAGTTCCCACTTA
TTCAAACAACAAACACTTTGTGATGCTGAGGCAGGCTGCTGTTTGTGGAAGGTGGGTACTCCTACTGGTA
ACTCCCATCAAGCGGGTTTCTATTCAGTTTTGGAGTTTGGTTTGAGTTTGATATTTACAGCCAGTGTCAC
TGTATGGCACAGTCTGACTTCAAATTTGTGATGATCTTCCTGCCTCAGCCTCTCAAGTGCTGGGATTACA
GGTGTGTTCCACAACTGTTGAATTTCACACCAAGGAACCTGGGTTCCAGGGCAAACAAGGGTCCTCCTGG
CCCATAGGGAGAATGATCATAGCTGAGTCTAAGTCCATGTTCTAGTTGGTTGCCTGGGGCCAGAGTGGGC
AGGGACAGACCCTGTCCTCTATCAATATTCTTAACTGGGCCAGGAGTGTTGGCCTTCAGTCCTGGAGCAT
TGGGCCCCCTCGCCAGCCTCACTGCCACCTTTGAATGCTCCTTGTGTCAGGGACCTCACCCGCTTTACAA
TATCACCTATCCCTAGCATGCTAGACCTGGGTGCAGATCCATAGCTTCCAAAGTCCATCTGGAAAACAGA
TGGTGGTGCTCACTAAGCGGGTGAAGAAACTCAAGCAAGGAGGACCTGTCTGGACAGGGACCAGAGATGC
CTGATGCAGATCTAAGCACCTCTCCCAGCCACAGGAACACAGAGGTGGCAGAGCAGGTGATGAGTGGGAG
CCAGCAGGGATGCTGCTGCTGTAAGGTCACAGATCTCTCTGCCACACACCTGGATCCTGCAGGGCCAGCC
CCAGCTGGGGTAGGTTGGCAGCATCCCCTCCAGGGTTAGCCGTGTGACTATTTGGATGATGTGCAGGCAG
GTTTCTGAGGTTGTCACCTGGGTGGTGTCACCTAGTGCATGGGTCTCTTGCCAATCCCATGTCTGTAGAG
CCTTCTGTAGCTACCCAATCCTGTGAGTGGGTAGAGGGCTGACAGCTGCCATTTGCTATAGGTGAAATTG
CTCTGTGGTCTCTGGTGGTGCTGGCCATTGAGCGCTATGTTGTCGTGTGCAAGCCCATGAGCAACTTCCG
CTTCGGTGAAAACCATGCCATCATGGGTGTTGTCTTCACCTGGATCATGGCGCTGGCCTGCGCTGCACCA
CCCCTTGTCGGCTGGTCCAGGTAATGCCATCCCCAAAGCCACCGGGACAGGCACTAAGGTGCTGGTCCTC
CTCCCAAGTCCCATGTCAAGGAGACTCCCAGGTTCCCCAATTCTTCACCTTGGCCGAGCTCCTAATCCTC
AGCTAAGCCAGGGCCACATCCAATCCTCTTTGTCCAACCTGCACTGACCTTGGGCCATAGCAGCTTCCCA
GACAGGGTGACATCAACCCCAGGAATGGGATCTTCCAGCCTCCTGGCCACTGTTTCCAAAAGAGCTGAGA
TGGTATCCAGAGCCTGTGTTCCTCTGGTCTGGGAAACTCACGTTTCTGCTCACCTCCTTCCACGTCACCC
CAGGGCCCCTTCTCATCCTTGCTCCTGTCTTCCTTATCCTGGCTCAGCATAGCCCTGATGGTGCCGCTCA
TGGCTGCTCTGGGTTAGCTGAGTGACCTCAGTCCTCATCCTCAGGAGTCACAGGAACACCCTTACCCTGT
GTCCTGGGCCTTATGTTCCAGGAAGCTGCTCAAAGACCCCTTCTGAGTGCCCGTGTCCATCTTCGGCCTA
GAAAACACTTATACCCTGTGACTGGGAAGACCCAGCAAGGCACACGTGCTTGTCCCCTGTCCTCTGTCCC
CTAGGCCTTGGCTAATAGGTCAGGGTAGCAAGGACGGCTGAGGGCTCGCCCAGTGGCAGGGACCATGCAG
AGTTGTCTGAACCTGGCCAGGCAGGCAGCTCCTGGTCCTGTGGGTCTGGGCACTCATGGACATGGTCCTC
AGGTACATCCCCGAGGGTATGCAGTGCTCATGTGGGATCGACTACTACACACTCAAGCCTGAGGTCAACA
ATGAGTCCTTTGTCATCTACATGTTCGTGGTCCACTTCACCATCCCCATGATCATCATCTTCTTTTGCTA
TGGACAGCTGGTCTTCACCGTCAAGGAGGTATGGGCAGGGGGGCCTTGGGGTGGTGTCCAGGTGGGTGCT
GGGCAATAGTACTAAGTGACTGTGCTGGGTGCCACCATCTGGACACAGGTCCCATGTCCCCACAGGCAGC
TGCACAGCAGCAGGAGTCAGCCACCACCCAGAAAGCGGAGAAGGAGGTCACCCGCATGGTCATCATCATG
GTGATCGCCTTCCTGATCTGCTGGGTGCCCTATGCCAGTGTGGCCGCATACATCTTCACCCACCAGGGCT
CCAACTTTGGCCCCATCTTCATGACCGTCCCAGCTTTCTTTGCCAAGAGCTCTTCTATCTACAACCCTGT
CATCTACATCATGATGAACAAACAGGTGCCTGGTGTGGGTCCCCAGGGCATGGGTCCCAAGGATGGTAGG
GACACAGGCTTCAAGATCCACATCCTGGGCCCCATCCTGGGTTGCTGGATCCAAATCTCAGCTGGGCCCA
AAACACTGTGTTTGTCACAAGCTCTCCAGGTGAACTTGGTGTTGGTCAAGTGTGTCAGGTACCAGCTTTG
AGGGCTCTGGAAGCTGGCTTGAAAGCCATCCAGTGTGGAGTATGGGAAGGGGATGGCCCCAGCTATAAAA
CTGGGAGGGTGGAGCTGCCCTGACAAGGCCAGGAGTCTTCTGGGGCACAGTCTCTGCAGCCAGGCATGCT
GGGTTAGGCCACTGGCTCTGCCATATTCTAGCTAGGCAACATTGGGCAAGTCAACTCTCAGCTCTGGGCC
TGAGTTTCCTCTACCCTAGAAAGAATGAAACCCCAAACTCTGGAATTAAATGTGAAAATTAATTACATAG
TAACACAGAGCACATCATCAGTAACCAAGGCCCCTCATGCTGGGTTCCTAGTATCTCCAGGTAGTGTCAT
CACAGGGTCAGTTGTCCCCACACTGACCCGGCCCCTTGCCTTCCAGTTCCGGAACTGCATGCTCACCACC
ATCTGCTGTGGCAAGAACCCTCTGGGCGATGATGAAGCCTCCACCACTGTCTCCAAAACTGAGACCAGCC
AGGTGGCCCCAGCCTAAGGCCTGCTGGGGCCCCTGCAGCCGACTGTAGGACCCCCTCCACCCCCCACAGC

CACCCCACCAAGAGCACACCTGCCACAATGTGGCCATGGGTGCCCCTGAGTTTGTTTCTATTTAAATAAT
CAGAGAAAAATGAGGTCCCCATTCTGCAGGGACAGCCTGAGAAGGGACACTCACACAGCCCCCAATCTGG
AGTCCCCCAGCTCTCAGGGGCTGGGGGGCTGCACCCCTCCCCCAGCTTGTCTTGGGAACATAAGAACTCT
TGCTTTCTGGAAAGGTGCCCCACTTAGGGCTAAGCATCTAGCACATAATGGGAACACAGTAGGTGCTTGA
TAAATGCTAGCTGGATGAAGGAAGGAATGGGTGAAGGAAGGAATGGAGGAATGCATGAAGGGCGAATGTG
TAGAAAGACACATCCATCCTCTCAGACCTCATGGCACATGGTGATGAGTCAAGCAGTGGTTCCCTACCAT
AGCATGGAACTCCAAAGTTCGGCCCTGGCAGCACACGGCTGCTGCAAAGACCAAATAAGATGGTGTGCCT
GTTCGTGTGGGTGTGTGGGTGTGTGTGCATGTGTATTTAAGCACTTTGTAAATAGTAAGGAGCTATACAG
ATTGCAGTCTACATTATGAACAATATCGACTAATAGAATTAGTGAATTATCATGGTCATCTCTTCCTGAC
AGTCACAACTGGAGATCAAACAGGTCCCAGCATTCAGACAAAGGGGCTTCATGCATACTCTTGCAGGTTT
GCAAAATCAGCCTGAGCCTCAGAGGTGGGTGGCAGGGAAAGACAGCTCCAGGGACGCAGTATCAGCCAGT
AGATCAGAAAAAGCAGCTCAGGCACTGTGAAAGTCAGGCCTGAGCCTGAGTTTCTGGAAGCCATCTACTG
TTCCTTCTTGGCAGTTGGACCATAGCCACCCTGTCCAAACTTAATAGAGAGCTAAGTCCCTGATGTCACT
AATGCTGGAGAGCTTAGAAACCAAAAGGCACCTGGTTGATGCACCCCCACCCAGGAGCCCCTGGGTCTTG
GTTTCAGCCCGCTTGTGAGACAAGTTCAGCTTCAGCAGCCACAGCCTGCCCCTCCTGCAGTCTTCTCTGA
AGCCTGAAACCTGGGCCAGGATCGAGCTGTCTCGGTTATTGCCAGAGCCTGGAGTCTGAGGCCCACGGGG
CATTAAAAGCTCAGCTCGGTCCTGCTGTCCGTGTTAGTAGTTTTTGTTCTCAGCCTCCTCACCCACAGGA
TGGACTAGCACCAGCAGCTCCAACCTGAAAATCAGCCTCGGGGAGTGGGCTGTTCAGTGGGCAGAGCCAA
GTAGCTCAGTGTTGTTGGGGAATGAGAGGACCCTGGATGAGGGGGACACCTGACCTGGGGTTGCAGAGAT
GCAGGGACTTAAGGAATAACAGCAAGCACTGCAACTTCTGCAGACTTCCCTGAATTTGATCTTGAGGGGT
TAGCAAGGTTGGGACTTCACTCTGGTGCAGTCAGAGAGAGACTCTGGCATCTCCAGGCTCAAAACTGGTC
TTACTGAACACCAGCGCCCCATGGGAAGGAATGGAGACACAGTGGCTGGGAGTGCCCTGTTCTCTTGGGT
GATAGGAAGCACAAGTTGCCCACCAAGATCAAGGCCCTGCCTGGAGGCTGGCAGAGGTGGTGTTAGAGAC
CCCAATAACTGTCCTTTACCCTCTATCTGGGTGGTAGTGGGCAGAGCACCTCTGGTGGTAAACCATGGGA
AATGCAGTTCAGATGGGTCAGAGGAAAAGGGTGGCATCATTCTCCCACAGAAAGGAAAAACCCAGGGCTT
GCAGGCAAGCATGTGATATGATCAGGTCTATCTTTTCCCTTCTGGCTACACTTTTTCATGTTGGCTTCAT
TCACAAGTCAACACTTCACAAGAGGTGGCAAAAATGGCCACCCTAGGTCCAGGGCTCAGCAAGTGGGCAT
CTCTTTCCCCTTAGTATAGCCAAAGTTCCACATAGGGCTTCAATTGGCAAGGCCCAGATCATGTGATCAC
TCTTGAGTCTGTCACTAAACCTGGACTGGGATTCATCCTCTTATTGGCCAGGCCTGAGCCACCTGATCAC
CCTTGAACCTATCACCTTGCTTGAACTGGATGTAGTCTCTCCTGA

Macaca Mulatta

>NC_041755.1:c146951349-146944885 Macaca mulatta isolate AG07107 chromosome 2, Mmul_10, whole genome shotgun sequence

GGTCTGGGGGGGTGAGAGCCCAGAGTCATCCAGCCAGAGCCCTGAGTGGCTGAGCTCAGGCCTTCGCAGC
ATTCTTGGGTGGGAGCAGACGCGGGGCAGCCACAAGGGCCACAGCCATGAATGGCACGGAAGGCCCTAAC
TTCTACGTGCCCTTCTCCAACGCGACGGGCGTGGTGCGCAGCCCCTTCGAGTACCCGCAGTACTACCTGG
CCGAGCCATGGCAGTTCTCCATGCTGGCCGCCTACATGTTCCTGCTGATCGTGCTGGGCTTCCCCATCAA
CTTCCTCACGCTCTACGTCACTGTCCAGCACAAGAAGCTGCGCACACCTCTCAACTACATCCTGCTCAAC
CTAGCCGTGGCCGACCTCTTCATGGTCTTCGGTGGCTTCACCACCACCCTCTACACCTCTCTGCATGGAT
ACTTCGTCTTCGGGCCCACAGGATGCAATGCGGAGGGCTTCTTTGCCACCCTGGGAGGTATGAGCCGGGT
GCGGGTGGGGCTTGCAGGAGCCCGGGAGCATGGAGGGATCTGGGACAGTCCCGGGCTTGGCGGTAGTGGC
TGAGAGGCCTTCTCCCTTCTCCTCTCCTGTCAGCGTTACCCAAGGCCCTCATATATTCAGTCAACAAACA
CCATTCATGGTGATAGCTGGGCTGCTGTTTGTGCAGGGCTGGCTCTGAACGCTACCTTGATCTTACCTGG
AGCAACATGCACTTATCTAATTTCACAGCCAGAAAACTGAGCTGAGGCTCAAAGAAGTCAAGTGCCCTGC
TGGGGGTCACAATGGGATGGGGGCAGAGTTGAGTTTGAAGCCTGCATCCATCTTGGGCCGTGTTGGCAAC
ACCAAGCCTCTGTTTCCCTCGGAAAACAGGTCAGACCCAGGCTGGGCACTGAGGAGAGAGCTGGGCAAGC
CAGACCCCTCCTCTCTGGGGGCCCAAGCCCAGGGTAGGAAGTGGATTCTCCATTCTCCAGTCATTGAGTC
TTCCCTGTGCTGGGTAATGGGCTCGGTCCCCTTTGGCATCCTCTGCCTCCCCTCCCAGCCCCCCGTCCCC
GGGTGCCCCTCTAGCCTCCATGCCGCGCTCCAAGGCTCCTGGTGTTGAGAACTGCATGCAGCCCCTCTGA
AGCAGCTGCTTTTTGCTTTAGAATAATGTCTTGCATTTAACAGGAAAACAGATGGGGGTGCTGCAGGGAT
AACAGATCCCACTTAACAGAGGGGAAAACTGAGGCAGGGAGAAGGGAATAGACTTATTTAGGGATGTGGC
CAGGCAGCAACAACAGCCTAGGTCTCCTGGCTGTGATCCAGGAATATCTCCGCTGAGATGGAGGAGATGT
TAGCGGCAGCCACTGCAAAGCTGGGTGACGAGGAGAGCTTACCACCAGTCACAAGCATCACCCTGCCAGC
CTTGCCCTCTCTCCCCCATGTCCAGGTTGCCTCCTCGGTCCCATTCTCAGGGAATCTCTGGCATTGTTGG
GTATTTGTTACATCAAATAATCACAGATCACCCAGTTCTGGCCAGAAGGTGGTGTGCCACATACGGATGG
TTGTTCTCTGCAGGGTCAGTCCCAGTTTACAATTATTGTCCCTTTCACTGTTAGGAATGTCCCAGTTTGG
CTGATTAACTATATGGCCACTCTCCCTGTGGAACTTCATGGGGTGGTGAGCAGGGCAGATGTCTCAATTT
CATCATTTCCTTCTTCTTCCTCTGGGCAAAGCATTGCCCATTGCTTCATGGCTCCTAGGAGAGGGCCACA
CTTGCCCGTGTTGTTTCATCTCCCGAGAAGAGAGAGGGATGAAGGACTGCCAATTCTGGGTTTCCGCCAC
CTCTGCATTCCTGCCCAACAAAGAACTCTGCCCCACATTAGGATGCATTCTTCTGTTAAAAACAAACAAA
AAACCCCACAACTCCCTACCGGGTTCTCAGTCCAATCGTGACCCCCTGATCTGATTCGTGTCCCTCATGG
ACCCAGAGCACTAAGCAAATAACTTCCCCCATTCCCTGGAGCTTCTTTGCCCAGCCCTCCTCAGCATGTG
GTCCCTCTGCCCCTTCCCACTCCTCCCAGTGCCAAGCTCTCTCCTTCCCCAAGGCCTCCTCAAGTCCCTC
TCCCACTCCTGGTTGCCTTCCTAGCTACCCTCTCCCTATCTAGGGGGAGTGCACCCTCCTTAGACAGGCA
GTGGGGTCTGCTGACAGCCTGCTGACTGCCTTGCAGGTGAAATCGCCCTGTGGTCCTTGGTGGTCCTGGC
CATCGAACGGTACGTGGTGGTGTGTAAGCCCATGAGCAACTTCCGCTTCGGGGAGAACCATGCCATCATG
GGCGTTGCCTTCACCTGGGTCATGGCACTGGCCTGCGCCGCACCCCCCCTCTTCGGCTGGTCCAGGTAAT
GGCATTGAGCAGAAGGGAAGAGGCTCTTTGTAGGGTCCTCCAGTCAGGACTCAAACCCAGTAGTGTCTGG
TTCCAGGCACTGGCCTTGTATGTCTCCTGGCCCAAATGCCCACCCAGGGTAGGGGTGTAGGGCAGAAGAA
ATAGACTCTAATGTTGCTAAAAGCGCTGGTCCCATCTCCTGAGCTCTATGTAAAAGAGAATCCAAGACAT
CCCAACCCTTCACCTTGGCTGTGCCCCTAATCCTCAACTAAGCCAGGCGCAAATTCCAATCCTCTTTGGT
CTAGTACCCTGGGGGCAGCCCCCTCTAACCTTGGGCCTCAGCAGCAGGGGAGGCCACACCTTCCTAGTGC
TGGTGGCCATATTGTGGCCCTTGGGAACTGGGTCCCATTCAGCCTCTAGGCGATTGTCTCCAAATGGGGC
TGAGATGAGACACGGTGGGGACAGTGGTTTGGACAATAGGACCGGTGACTCTGGTCCCCTGAGGCCTCAT
GTCCCTCTGTCTCCAGAAAATTCCCACTCTCACTTCCTTTTCCTCCTCAGTCTTGCTAGGGTCCATTTCT
TACCCCTTGCTGAATTTGAGTCCTCCCCCTGGACTTTTTCCCCATCTTCTCCAATCTGGTTCCATCCTCC
GGAAGCACAGCCTCTGGACGCTCTGGGTTTCCTGAGGCCAGTCAACTGTCACCAATATCAGGAACCACTG
CCACATCCTAACAATGTGCCCTGGAAACCTCGTTTCCAGAAGCTGCACAAAGATCCCTTAGATACCCTGT
GTGTCCATCTTTGACCTGGAAAATACTCTCGCCCTGGGGCTAGGAAAACCTCAGTTTATACAAACTGCCT
CAAATACAGAGCCTCCCCTCCTCCTCACCAACCTCTGCCTGGCATAACCCTAGTCTCAGAGGGCAGTGGA
TGCTGGGGCTGGGCATGCCGGGAGAGGCTGGGTGGTATCATCTGGTACCGCAGCCACCAGTGAAGCGACA
CTGATTCCACAAGGTGCGTCTGCATCCCCATCTGATCCATATTCCATCCTGTCACCCAGCCATGCAGACG
CTTATGATCCCCTTTTCCAGGAAGGGAATGTGAAGCCCCAGAAAGGGCCAGCGCTCGGCAGGCGCCTTGG
CCAAGTCCCTCACAGGCGGGTTCTCCCTACCTGCCCGTCCTCAGATACATCCCCGAGGGCTTGCAGTGCT
CGTGCGGAATTGACTACTACACGCTCAAGCCAGAGGTCAACAACGAGTCCTTTGTTATCTACATGTTCGT
GGTCCACTTCACCATCCCCATGATTGTCATTTTCTTCTGCTACGGGCAGCTCGTCTTCACCGTCAAGGAG
GTACGGGCCGGGGAGTGGGCAGCCTCACGGCTCTGACAGTCCAGCCCCCAGCATGTATCTGCGGCTCCTG

CTCCCTGGAGGAGCCATGGTCTGGACCCGGGCCCCTTGTCTTGCAGGCCGCTGCCCAGCAGCAGGAGTCG
GCCACCACACAGAAGGCAGAGAAGGAGGTCACTCGCATGGTCATCATCATGGTCATCGCTTTCCTGATCT
GCTGGGTGCCCTATGCCAGCGTGGCATTCTACATCTTCACCCACCAGGGCTCCAACTTCGGTCCCATCTT
CATGACCATCCCAGCGTTCTTTGCCAAGAGCGCCTCCATCTACAACCCTGTCATCTATATCATGATGAAC
AAGCAGGTGCCTACTGCGGGTGGGAGGGCCCCAGTGTCCCAGACCACGGGCACTGCCTGCCAAGGACAAA
CTGCGTCCCAGGGCAGGGGAGGGGGCTCCATCAGGGCTACTGGCAGCAGTCTTGGGTCAGCAGTCTCAAT
GGGGAGTGTGTGAGAAATGCAGATTCCTGGCCCCACCCAGATCTGCTGAATCTCAGGGAGGGCCCAGGAA
CCTACATTTCCAACAAGCTCTCCACAGGTGGCTCAGATGCTCACTGAGGTGGGAGAAGCTCTAGTCCAGA
TAGTTCTGGAAGCCCAATGTCAAAGTCAGAAGGTCCCAAGAGGGGAATGGATGGGCCAGTCTCCATAAAG
CTTAATAAGGAGCTAAAAAGTCTTATTCTGAGGGGTAAAGGGGTAAAGGTTCCTCTCCAAGGAACTCAGA
AGTTGGGGTAAACAGTCTCTGAAGTCAGCTCTGCCATTTTCTAACTATGTGACCCCATGCAAGTCAATTC
CCCTCTCTGTGCTTTGGTTTCCTCATCCATAGAAAGGGCAAAACACCCAACTCTCAGATTACAGGAGATA
ATTTACAGAACACCCTTGGCACACAGAGGGCACCATGAAATGTCATGGGCGACACAGCCCCCTCGTGCTG
GGTCCCTGGCATCTCTAGGGGTGAGGAGCGTCTGCTTAGCAAGTTTCCTCCAGGAAGCCAGATTTGAGTG
GACGGGGCGCTGGAACTGTGAGGGGCAGAAGCAGGGAAAAGGTTGGGGCAAACCTCACTAACGTGCCAGT
TCCAAGCACACTGTGGGCAGCCCTGGCCCTGACTCAAGCCTCTTGCCTTCCAGTTCCGGAACTGCATGCT
CACCACCATCTGCTGCGGCAAGAACCCGCTGGGTGACGATGAGGCCTCTGCCACCGTGTCCAAGACGGAG
ACTAGCCAGGTGGCCCCAGCCTAAGACCTGCCTAGGACGCTGTGGCCGACTGTAGGCGTCTCCCGTCCCC
CACACCCTCCCCCAGCCACAGCCATCCCACCAGGAGCAGCGCCTGTGCAGAATGAACGAAGTCACATAGG
CTCCTTCATTTTTTTTTTTTAAAGAAATAATTAATGAGAGAAAAATGAGGCTCCTCACTCACCCGGGACA
GCCTGAGAAGGGACATCCACCAACACCTACTGATCTGGAGTCCCAGGTTCCCCAAGGCCAGTGGGATCTG
TGCCCCTCCTCCTCCCAGCTCATCTTTCAGGAACATGAGGATTCTTGCTTTCTGGAAAAGTGTCCCAGCT
TAGGGATAAGTGTCTAGCACAGAATGGGGCACACAGTAGGTGCTTAATAAATGCTGGATGGATGCAGGAA
GGAATGGAGGAATGAAAGCGAAGGGAGAACATATCTATCCTCTCAGACCCTCTTAGCAGCAGCAACTCAT
ACTTGGCTAATGATAAGGAGCAGTTGTTTTTCCCTCCCTGGGCCTCACTTTCTTCCCCTATAAAATGGAA
ATCCCAGATTCCTGGTCCTGCCGACACGCAGCTACTGAGAGGACCAAAAGAGGTGTGTGTGTGTGTGTGT
GTGTGTGTGTGTCTATGTGTGTGTTTCAGCACCTTGTAAATAGCAAGAGCTGTACAGATTCTAGTTCATG
TTGTGAATAACATCAATTAATGTAACTAGTTAATTATTATGATTATCACCTCCTGATTGTGAACATTCTG
AGACTGGGCATTCGGATGATGGGGTTTCACCCAGCCTCGGGGCAGGTTTTTAAAAATTAGCTAGGCGTCA
AGGCCAGACCAGGGCTGGGGCTGGGCTGCAGACAAGGACAGTCACAGGAATGCAGAATGCAGTCATCACA
CCTGAAAAAACAACATTGGGGGAGTGGGGCGATGAAGGCCAAGTTCTCAGTGAGGGTGAGATTGGGCCTG
GGGTATCACCCCTACTGTGAGGCCCCAGACCCCGTGCCTCCCCTTCCCAGTGTGGCTTATGGAGAGACAC
GCCTTTCTCTCAGCCTCTGGAAGTCACCTGCTCTTTTGCCCTAGCACCTGGGCCCCAGCATCTACAGCAT
GGAGCCTCTGGAAGATATGCTCACCGGCCCACATTTAATGAACAGCTGAGTCCCTGATGTCATCCTTATC
TCAAAGAGCTTAGAAACAAAGAGTGGGAAATTCCACTGGGCCCACCTTCCCTGGGGATGTTCATGGGCCC
CCGTTTCCAGTTTCCCTTGCCAGACAAGCCCATCTTCAGCAGCTGCTAGTCGATTCTCCATTCTGGAGAG
TCTGCTCCAGAAAGCTGGCCACATCTCTGAGGTGTCAGAATTGAGCTGCCTCAGTAACTGCTCCCGCCTC
TCCATATAGGCAAAGCCAGAAGCTCTAGCTTTACCCAGCTCTGCCTGGAGACTAAGGCAAATTGGGCCAT
TGAAAGCTCAGCTCCTATGTTGGTA

Alligator Mississippiensis

>NC_081835.1:15133167-15137499 Alligator mississippiensis isolate rAllMis1 chromosome 12, rAllMis1, whole genome shotgun sequence

TTGCCAACTTCTGCAAGTTTGAGGAAGAAGCAGAGATAAGAGGAGAGCAGGAAGAGGAGATCTTGAAAGA
AAGCAAAAAATATTTGTAAGACCATAACACCTCGGAAGCCGCAGCCATGAATGGAACAGAAGGTCCAGAT
TTCTATATCCCCTTTTCCAACAAGACTGGGGTAGTACGGAGTCCATTTGAGTATCCGCAATACTACCTGG
CTGAACCATGGAAATACTCCGCGCTGGCCGCTTACATGTTTATGCTGATTATTCTTGGCTTCCCTATCAA
CTTCCTGACTCTGTATGTCACCGTCCAACACAAGAAGCTCCGTTCGCCTCTAAACTACATCCTTTTGAAC
CTGGCAGTTGCTGATCTCTTCATGGTCCTGGGAGGCTTCACCACTACCCTGTACACATCAATGAATGGGT
ACTTTGTCTTTGGGGTAACAGGTTGCTACTTTGAAGGCTTCTTTGCTACTCTTGGTGGTAAGTTCACTAA
CTGAGTAAATAGCCAAATATGTTCTGTCAGAGTTCCCTTGAGCTGTAGGAAGGGGAAGCCAGGGCCAGGT
GGAGGGGCAGGGGGGAAGACGGGAAGGCAGCAAAAAATGGCTTTCAATGCATCACCAAGACCTGGAGGCA
CTTGGAATTTATATTTTCAGGCTGTATGTTTGGCTTTCAGTGTTGTAGAAAAGTTATATTTCAGACAAGA
GAAGTGTGGGAGGACAAAGAACACATGATGTTTGCCATCTTCCTTTACTGCTTTGGGGAAAACCCAGTGG
CTGAAAATGGTTGAAACTGGACTGTGGTATTGAAACGTGACCTGGAACAGTATTCCAAAAGTGGTTTTAT
GCTGACTTTTAACCTTGGAAATGGCAAGCCTGGTCTTCCCTGGTTTTGCTGGAAGAATTTCAGAAAGGTC
CCAAGGTACTTTACTGTAGATCCCCATACTTAAATTGAAGGAATAGACTTACTTACCCTTTAAAAGTAAT
CTTCTCCCCCATGTGTCAACTGATTGAAATAGCTGTTTACAGGAAATGGTAGGCCTAAAACCCTTTCTTT
TCTGCATCCAGTTCATCCTTCAGGCAGATAAGTCTGCTCAGGTCACCATCTAACTAGTTCTTTGGTTACC
AGAGAGTCTTCTAAGGTAGATGAGTTCTAAAATGTATACTGAAACACAAAAAACCTCCCAACATCTTGAC
AACAACCTCTCTACCTTTGTTTACCACTGGGTGGAAGGTAAGAAGGATGTAGACCCAATTTCCACTTTAC
TGTGAGCTTTGAAATATCCTACTAATGTTGTTCCCAAACCTGAGATATGCTGGGCAGAGGGCAGAAACCA
ATGAGTGGTCAATTCAGTGTGCATTCCCTAGCACAATCAGGCGCATGGAGTTAATAAGTAGCAAAACAAG
TGTGGGGAGGACAGGTTGGACTCAAACATAAGATAGGGCATTCCAGTGGAACTCAAAATACTGCAGCAAA
ATGAGTGTACAATGGGTTAGTCAGCCATTTGTGCCTTCCTTCCCATGCTTTAATTCAGATTTTTTTTTCA
CATTCAAATCTTACTTGCATTCTTTGATCATTCAGAGACTTGTTTGGAATCCGTTATCCAAGAAGCTTTC
ATATACAGGACAACACGTTTTTCTTCTGTTGCAAGCAGTATATGAATATGTGTGTGTGTGTCTCCTACAC
AGGTGAAGTGGCTCTGTGGTGCTTGGTAGTCCTGGCCATTGAAAGATATATAGTGGTCTGCAAGCCCATG
AGCAATTTCCGATTTGGTGAGAACCATGCCATTATGGGTGTCGTTTTCACCTGGATCATGGCCCTGACTT
GTGCTGCTCCCCCACTGGTCGGATGGTCCAGGTAGGCATATTATACATTTTCTGAAATAAGGCATCATCT
AGGACAGCATTTTTCCATTCTAAAATTGCAAAGCCTGATTCCCCAGTGGCACCAGTGCAATGCCAGGTAC
TAATCTCATCGGTTTAATGGCAGGTACATCCCAGAGGGCATGCAGTGCTCATGCGGGGTTGATTACTACA
CCCTGAAGCCTGAGGTCAACAATGAGTCCTTTGTGATCTACATGTTCGTAGTTCACTTCGCCATTCCACT
GGCTGTCATTTTCTTCTGCTATGGACGCCTGGTCTGCACTGTGAAAGAGGTAGGTTGACCTGCTGGTGAC
GGACTGCCATCAAAACCTGCGTGTGAATGCTAATGCCAAATTTTTGGAAAGCTCAGATGCAGCTTGGAAC
TCCGCAGCTGGCTCCATCCCTGTTGTGGGAGGAGATGCCGTTCCAGCCTTTTTTTCCCCAACACTTTCCC
ATGGAACCATCATAATTTCTTTGTTCTTTTGCCTTAGGCTGCAGCCCAGCAGCAGGAATCAGCTACTACC
CAGAAAGCCGAGAAAGAAGTTACCCGCATGGTCATCATCATGGTCGTTTCTTTCCTGATATGCTGGGTCC
CCTATGCCAGTGTTGCTTTCTACATCTTTTCCAATCAGGGATCTGACTTTGGTCCCGTCTTCATGACCAT
CCCGGCATTCTTTGCCAAGAGCTCTGCCATCTACAACCCAGTGATCTACATTGTCATGAACAAACAGGTA
ATTAACAAGTGCAGTTTTTTCTTCAATGTATTTCATTTCTTAAAAGCTTGAACCTTGCTCATAGATTTAA
AGGTTAATGTGGCATGAAAGGAACTTTTAAAGTCAAATGTGTTCCTATAATACACAGGGATGACTCTATT
AATTATCTCACTATCCTTTGGTATTACACAGATGTGGAAGCTGTCAAGCCGGTCTGCTTGAAATGATCCA
ACTACTTAAGATTTAACTAAGTATCTAGGCCTCTGTTCTGCTCTCAGCCACAGTGGCTCCAGTAGGAAAG
TTAGGATAATCCTGAATCAGAGTTGTAGCTAGTTTTAAGGAATGAGACATGTACAGAAGATAAGATTTGG
CACATTGGATGAACCATCAGTCCATCACATATAAAGTCTTACCTCTGCCAGTGACACTTAAATCAACTTC
CCTACTTTGCCATCACTGCCACCTTAAATCAGGAACGAACATTTCTTCCACACCCTGTCTTCATCATCAT
CCCCTGCCCCAAAAGCATGAGGTTAGCCTAGGCTCATATTAGCAAAAGGTGCAGCATGTCATGCTCACCA
TTTAAAAATCAGCATTTACTCGCAGTGGTACTGGAGATAGGGCAGCATTTCACTCTGCTTATAATGGGAT
GTCGCTGTGGTATCAGAGAGATGTTTCCATGCTAGCAAAGGTTGATTTTTAATGGCTACCATTGCCTATC
CTGTTACCCTAGATTAAAAGAAAGGAAGGAAGGGATTGCTTTTACTTTCAGAACACTAGAATACTTGATG
AGAATACATTCTCACTTGTAGAACAGCTATGTAGTTGTGAAGCAAAGTAGGTTTTCTACCACCATCTCAT
TATTAACTTTAATCTTTCTCAAGAGCATTCCAACTAATGACTCCCATGGATGGTGAAAAGGACATGAATA
TAACAGTGGGAGACAAAGGGCTGCTCACTGCATGCGAGAGCTGACAATTGTGTCTCCACTGCTCTTTTGT
CAGATTTTTAGCTGTTAACAAATTGTGGTCCTTCGAAAGGTCAGATCACTCCTGCCTTATTCACAGCAGA
AACTGCTTTTATTGCAAAAGCCCTATTCAAATGAGGATTCAATCCAAATCACACTAAAAAGAATGAGAAT
CTTTTAAATTGGTTCTTCTCAGAGTGGACTGACTTTTTAAAGGACATTTTAGTAGGGCTGACTTGGGTCA

GTCTTTGAGGCTCTTCTTTACTTAGAGCTCACTTTCATGCACACGCACGTGCAAGCACGCACACACACAG
GAATCTCTTTGGGTAAGCCACTGACCCATTTGATGTAAATAGAGAGTTCTCAGTGAATCTGATTAGTTGA
CCTTTGTCACCCTGGTCACCCCAGTAAGTCGACTCTCCTGACTTTGTGCTCTCTTCCAGTTCCGTAACTG
CATGATCACCACCCTCTGCTGCGGGAAGAACCCACTTGGTGATGATGAAACTGCTACTGGCAGCAAGACG
GAGACCTCCTCGGTGTCCACCAGCCAGGTTTCTCCTGCATAGATTCCTCCTGGAAGCAGCTGATCTCAGG
GCTGGCATGCATTGTCATCATGGACACTCAAATCCCATCTGCATGAATGTAGTCATGTTACTGTAATGAC
CACTGCCACCTGCATCCAATTCACAATTGACCCAGAAGGACGGACTTTTCAGTTCTGATAATAGAAATTA
TTTGAACAAGGCTGTAAATATTTTTAAAACTTAAATACAAAGGGTTAGCGCCTCAGCTGGTGT

Macaca Fascicularis

>NC_052256.1:49115764-49121449 Macaca fascicularis isolate CE1976F chromosome 2, MFA1912RKSv2, whole genome shotgun sequence

AGAGTCATCCAGCCAGAGCCCTGAGTGGCTGAGCTCAGGCCTTCGCAGCATTCTTGGGTGGGAGCAGACG
CGGGGCAGCCACAAGGGCCACAGCCATGAATGGCACGGAAGGCCCTAACTTCTACGTGCCCTTCTCCAAC
GCGACGGGCGTGGTGCGCAGCCCCTTCGAGTACCCGCAGTACTACCTGGCCGAGCCATGGCAGTTCTCCA
TGCTGGCCGCCTACATGTTCCTGCTGATCGTGCTGGGCTTCCCCATCAACTTCCTCACGCTCTACGTCAC
TGTCCAGCACAAGAAGCTGCGCACGCCTCTCAACTACATCCTGCTCAACCTAGCCGTGGCCGACCTCTTC
ATGGTCTTCGGTGGCTTCACCACCACCCTCTACACCTCTCTGCATGGATACTTCGTCTTCGGGCCCACAG
GATGCAATGCGGAGGGCTTCTTTGCCACCCTGGGAGGTATGAGCCGGGTGCGGGTGGGGCTTGCAGGAGC
CCGGGAGCATGGAGGGATCTGGGACAGTCCCGGGCTTGGCGGTAGTGGCTGAGAGGCCTTCTCCCTTCTC
CTCTCCTGTCAGCGTTACCCAAGGCCCTCATATATTCAGTCAACAAACACCATTCATGGTGATAGCTGGG
CTGCTGTTTGTGCAGGGCTGGCTCTGAACGCTACCTTGATCTTACCTGGAGCAACATGCACTTATCTAAT
TTCACAGCAAGAAAACTGAGCTGAGGCTCAAAGAAGTCAAGTGCCCTGCTGGGGGTCACAATGGGATGGG
GGCAGAGTTGAGTTTGAAGCCTGCATCCATCTTGGGCCGTGTTGGCAACACCAAGCCTCTGTTTCCCTCG
GAAAACAGGTCAGACCCAGGCTGGGCACTGAGGAGAGAGCTGGGCAAGCCAGACCCCTCCTCTCTGGGGG
CCCAAGCCCAGGGTAGGAAGTGGATTCTCCATTCTCCAGTCATTGAGTCTTCCCTGTGCTGGGTAATGGG
CTCGGTCCCCTTTGGCATCCTCTGCCTCCCCTCCCAGCCCCCCGTCCCCGGGTGCCCCTCTAGCCTCCGT
GCCGCGCTCCAAGGCTCCTGGTGTTGAGAACTGCATGCAGCCCCTCTGAAGCAGCTGCTTTTTGCTTTAG
AATAACGTCTTGCATTTAACAGGAAAACAGATGGGGGTGCTGCAGGGATAACAGATCCCACTTAACAGAG
GGGAAAACTGAGGCAGGGAGAAGGGAATAGACTTATTTAGGGATGTGGCCAGGCAGCAACAACAGCCTAG
GTCTCCTGGCTGTGATCCAGAAATATCTCCGCTGAGATGGAGGAGATGTTAGCGGCAGCCACTGCAAAGC
TGGGTGACGAGGAGAGCTTACCACCAGTCACAAGCATCACCCTGCCAGCCTTGCCCTCTCTCCCCCATGT
CCAGGTTGCCTCCTCGGTCCCATTCTCAGGGAATCTCTGGCATTGTTGGGTATTTGTTACATCAAATAAT
CACAGATCACCCAGTTCTGGCCAGAAGGTGGTATGCCACATACGGATGGTTGTTCTCTGCAGGGTCAGTC
CCAGTTTACAATTATTGTCCCTTTCACTGTTAGGAATGTCCCAGTTTGGCTGATTAACTATATGGCCACT
CTCCCTGTGGAACTTCATGGTGTGGTGAGCAGGGCAGATGTCTCAATTTCATCATTTCCTTCTTCTTCCT
CTGGGCAAAGCATTGCCCATTGCTTCATGGCTCCTAGGAGAGGGCCACACTTGCCCATGTTGTTTCATCT
CCCGAGAAGAGAGAGGGATGAAGGACTGCCAATTCTGGGTTTCCGCCACCTCTGCATTCCTGCCCAACAA
AGAACTCTGCCCCACATTAGGATGCATTCTTCTGTTAAAAACAAACAAAAAACCCCACAACTCCCTACCG
GGTTCTCAGTCCAATCGTGACCCCCTGATCTGATTCGTGTCCCTCATGGACCCAGAGCACTAAGCAAATA
ACTTCCCCCATTCCCTGGAGCTTCTTTGCCCAGCCCTCCTCAGCATGTGGTCCCTCTGCCCCTTCCCACT
CCTCCCAGTGCCAAGCTCTCTCCTTCCCCAAGGCCTCCTCAAGTCCCTCTCCCACTCCTGGTTGCCTTCC
TAGCTACCCTCTCCCTATCTAGGGGGAGTGCACCCTCCTTAGACAGGCAGTGGGGTCTGCTGACAGCCTG
CTGACTGCCTTGCAGGTGAAATCGCCCTGTGGTCCTTGGTGGTCCTGGCCATCGAACGGTACGTGGTGGT
GTGTAAGCCCATGAGCAACTTCCGCTTCGGGGAGAACCATGCCATCATGGGCGTTGCCTTCACCTGGGTC
ATGGCGCTGGCCTGCGCCGCACCCCCCCTCTTCGGCTGGTCCAGGTAATGGCATTGAGCAGAAGGGAAGA
GGCTCTTTGTAGGGTCCTCCAGTCAGGACTCAAACCCAGTAGTGTCTGGTTCCAGGCACTGGCCTTGTAT
GTCTCCTGGCCCAAATGCCCACCCAGGGTAGGGGTGTAGGGCAGAAGAAATAGACTCTAATGTTGCTAAA
AGCGCTGGTCCCATCTCCTGAGCTCTATGTAAAAGAGAATCCAAGACATCCCAACCCTTCACCTTGGCTG
TGCCCCTAATCCTCAACTAAGCCAGGCGCAAATTCCAATCCTCTTTGGTCTAGTACCCTGGGGGCAGCCC
CCTCTAACCTTGGGCCTCAGCAGCAGGGGAGGCCACACCTTCCTAGTGCTGGTGGCCATATTGTGGCCCT
TGGGAACTGGGTCCCATTCAGCCTCTAGGCGATTGTCTCCAAATGGGGCTGAGATGAGACACAGTGGGGA
CAGTGGTTTGGACAATAGGACCGGTGACTCTGGTCCCCTGAGGCCTCATGTCCCTCTGTCTCCAGAAAAT
TCCCACTCTCACTTCCTTTTCCTCCTCAGTCTTGCTAGGGTCCATTTCTTACCCCTTGCTGAATTTGAGT
CCTCCCCCTGGACTTTTTCCCCATCTTCTCCAATCTGGTTCCATCCTCCGGAAGCACAGCCTCTGGACGC
TCTGGGTTTCCTGAGGCCAGTCAACTGTCACCAATATCAGGAACCACTGCCACATCCTAACAATGTGCCC
TGGAAACCTCGTTTCCAGAAGCTGCACAAAGATCCCTTAGATACCCTGTGTGTCCATCTTTGACCTGGAA
AATACTCTCGCCCTGGGGCTAGGAAAACCTCAGTTTATACAAACTGCCTCAAATACAGAGCCTCCCCTCC
TCCTCACCAACCTCTGCCTGGCATAACCCTAGGCTCAGAGGGCAGTGGATGCTGGGGCTGGGCATGCCGG
GAGAGGCTGGGTGGTATCATCTGGTACCGCAGCCACCAGTGAAGCGACACTGATTCCACAAGGTGCGTCT
GCATCCCCATCTGATCCATATTCCATCCTGTCACCCAGCCATGCAGACGCTTATGATCCCCTTTTCCAGG
AAGGGAATGTGAAGCCCCAGAAAGGGCCAGCGCTCGGCAGGCGCCTTGGCCAAGTCCCTCACAGGCGGGT
TCTCCCTACCTGCCCGTCCTCAGATACATCCCCGAGGGCTTGCAGTGCTCGTGCGGAATTGACTACTACA
CGCTCAAGCCAGAGGTCAACAACGAGTCCTTTGTTATCTACATGTTCGTGGTCCACTTCACCATCCCCAT
GATTGTCATTTTCTTCTGCTACGGGCAGCTCGTCTTCACCGTCAAGGAGGTACGGGCCGGGGAGTGGGCA
GCCTCACGGCTCTGACAGTCCAGCCCCCAGCATGTATCTGCGGCTCCTGCTCCCTGGAGGAGCCATGGTC

TGGACCCGGGCCCCTTGTCTTGCAGGCCGCTGCCCAGCAGCAGGAGTCGGCCACCACACAGAAGGCAGAG
AAGGAGGTCACTCGCATGGTCATCATCATGGTCATCGCTTTCCTGATCTGCTGGGTGCCCTATGCCAGCG
TGGCATTCTACATCTTCACCCACCAGGGCTCCAACTTCGGTCCCATCTTCATGACCATCCCAGCGTTCTT
TGCCAAGAGCGCCTCCATCTACAACCCTGTCATCTATATCATGATGAACAAGCAGGTGCCTACTGCGGGT
GGGAGGGCCCCAGTGTCCCAGACCACGGGCACTGCCTGCCAAGGACAAACTGCGTCCCAGGGCAGGGGAG
GGGGCTCCATCAGGGCTACTGGCAGCAGTCTTGGGTCAGCAGTCTCAATGGGGAGTGTGTGAGAAATGCA
GATTCCTGGCCCCACCCAGATCTGCTGAATCTCAGGGAGGGCCTAGGAACCTACATTTCCAACAAGCTCT
CCACAGGTGGCTCAGATGCTCACTGAGGTGGGAGAAGCTCTAGTCCAGATAGTTCTGGAAGCCCAATGTC
AAAGTCAGAAGGTCCCAAGAGGGGAATGGATGGGCCAGTCTCCATAAAGCTTAATAAGGAGCTAAAAAGT
CTTATTCTGAGGGGTAAAGGGGTAAAGGGGTAAAGGTTCCTCTCCAAGGAACTCAGAAGTTGGGGTAAAC
AGTCTCTGAAGTCAGCTCTGCCATTTTCTAACTATGTGACCCCATGCAAGTCAATTCCCCTCTCTGTGCT
TTGGTTTCCTCATCCATAGAAAGGGCAAAACACCCAACTCTCAGATTACAGGAGATAATTTACAGAACAC
CCTTGGCACACAGAGGGCACCATGAAATGTCATGGGCGACACAGCCCTCTCGTGCTGGGTCCCTGGCATC
TCTAGGGGTGAGGAGCGTCTGCTTAGCAAGTTTCCTCCAGGAAGCCAGATTTGAGTGGACGGGGCGCTGG
AACTGTGAGGGGCAGAAGCAGGGAAAAGGTTGGGGCAAACCTCACTAACGTGCCAGTTCCAAGCACACTG
TGGGCAGCCCTGGCCCTGACTCAAGCCTCTTGCCTTCCAGTTCCGGAACTGCATGCTCACCACCATCTGC
TGCGGCAAGAACCCGCTGGGTGACGATGAGGCCTCTGCCACCGTGTCCAAGACGGAGACTAGCCAGGTGG
CCCCAGCCTAAGACCTGCCTAGGACGCTGTGGCCGACTGTAGGCGTCTCCCGTCCCCCACACCCTCCCCC
AGCCACAGCCATCCCACCAGGAGCAGCGCCTGTGCAGAATGAACGAAGTCACATAGGCTCCTTCATTTTT
TTTTTTTAAAGAAATAATTAATGAGAGAAAAATGAGGCTCCTCACTCACCCGGGACAGCCTGAGAAGGGA
CATCCACCAACACCTACTGATCTGGAGTCCCAGGTTCCCCAAGGCCAGTGGGATCTGTGCCCCTCCTCCT
CCCAGCTCATCTTTCAGGAACATGAGGATTCTTGCTTTCTGGAAAAGTGTCCCAGCTTAGGGATAAGTGT
CTAGCACAGAATGGGGCACACAGTAGGTGCTTAATAAATGCTGGATGGATGCAGGAAGGAATGGAGGAAT
GAAAGCGAAGGGAGAACATATCTATCCTCTCAGACCCTCTTAGCAGCAGCAACTCATACTTGGCTAATGA
TAAGGAGCAGTTGTTTTTCCCTCCCTGGGCCTCACTTTCTTCCCCTATAAAATGGAAATCCCAGATTCCT
GGTCCTGCCGACACGCAGCTACTGAGAGGACCAAAAGAGGTGTGTGTGTGTGTGTGTGTGTCTATG
TGTGTGTTTCAGCACCTTGTAAATAGCAAGAGCTGTACAGATTCTAGTTCATGTTGTGAATAACATCAAT
TAATGTAACTAGTTAA

Pan Troglodytes

>NC_086015.1:132772555-132779221 Pan troglodytes isolate AG18354 chromosome 2, NHGRI_mPanTro3-v2.0_pri, whole genome shotgun sequence

GGCTGAGCTCAGGCCTTCGCAGCATTCTTGGGTGGGAGCAGCCGCGGGTCAGCCGCAAGGGCCACAGCCA
TGAATGGCACAGAAGGCCCTAACTTCTACGTGCCCTTCTCCAATGCGACGGGTGTGGTACGCAGCCCCTT
CGAGTACCCACAGTACTACCTGGCTGAGCCATGGCAGTTCTCCATGCTGGCCGCCTACATGTTTCTGCTG
ATCGTGCTGGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACCGTCCAGCACAAGAAGCTGCGCACGC
CTCTCAACTATATCCTGCTCAACCTAGCCGTGGCTGACCTCTTCATGGTCCTAGGTGGCTTCACCAGCAC
CCTCTACACCTCTCTGCATGGATACTTCGTCTTCGGGCCCACAGGATGCAATTTGGAGGGCTTCTTTGCC
ACCCTGGGCGGTATGAGCCGGGTGTGGGTGGGGTGTGCAGGAGCCCGGGAGCATGGAGGGGTCTGGGAGA
GTCCCGGGCTTGGCGGTGGTGGCTGAGAGGCCTTCTCCCTTCTCCTGTCCTGTCAATGTTATCCAAAGCC
CTCATATATTCAGTCAACAAACACCATTCATGGTGATAGCCGGGCTGCTGTTTGTGCAGGGCTGGCACTG
AACACTGCCTTGATCTTATTTGGAGAAATATGCGCTTGTCTAATTTCACAGCAAGAAAACTGAGCTGAGG
CTCAAAGAAGTCAAGCGCCCTGCTGGGGCGTCACACAGGGACGGGTGCAGAGTTGAGTTGGAAGCCCGCA
TCTATCTCGGGCCATATTTGCAACATCAAGCCTCTGTTTCCCTTGGAGCAGCTGTGCTGAGTCAGACCCA
GGCTGGGCACTGAGGAGAGAGCTGGGCAAGCCAGACCCCTCCTCTCTGGCGGCCCAAGCTCAGGGTGGGA
AGTGGATTTTCCATTCTCCAGTCATTGGGTCTTCCCTGTGCTGGGCAATGGGCTCGGTCCCCTCTGGCAT
CCTCTGCCTCCCCTCTCAGCCCCTGTCCTTAGGTGCCCCTCCAGCCTCCCTGCCACGTTCCAAGTCTCCT
GGTGTTGAGAACCGCAAGCAGCCACTCTGAAGCAGTTCCTTTTTGCTTTAGAATAATGTCTTGCATTTAA
CAGGAAAACAGATGGGGTGCTGCAGGGATAACAGATCCCACTTAACAGAGAGGAAAACTGAGGCAGGGAG
AGGGGAAGAGACTCATTTAGGGATGTGGCCAGGCAGCAAGAAGAGCCTAGGTCTCCTGGCTGTGATCCAG
GAATATCTCTGCTGAGATGCAGGAGGAGACGCTAGAAGCAGCCATTGCAAAGCTGGGTGACGGGGAGAGC
TTACCGCCAGCCACAAGCGTCTCTCTGCCAGCCTTGCCCTGTCTCCCCCATGTCCAGGCTGCTGCCTCGG
TCCCATTCTCAGGGAATCTCTGGCCATTGTTGGGTGTTTGTTGCATTCAATAATCACAGATCACTCAGTT
CTGGCCAGAAGGTGGGTGTGCCACTTACGGGTGGTTGTTCTCTGCAGGGTCAGTCCCAGTTTACAAATAT
TGTCCCTTTCACTGTTAGGAATGTCCCAGTTTGGTTGATTAACTATATGGCCACTCTCCCTATGGAACTT
CATGGGGTGGTGAGCAGGACAGATGTCTGAATTCCATCATTTCCTTCTTCTTCCTCTGGGCAAAACATTG
CACATTGCTTCATGGCTCCTAGGAGAGGCCCCCACATGTCCGGGTTATTTCATTTCCCGAGAAGGGAGAG
GGAGGAAGGACTGCCAATTCTGGGTTTCCACCACCTCTGCATTCCTTCCCAACAGGAACTCTGCCCCACA
TTAGGATGCATTCTTCTGCTAAACACACACACACACACACACACACACACCACACACACACACACACACACA
AAACTCCCTACCGGGTTCCCAGTTCAATCCTGACCCCCTGATCTGATTCGTGTCCCTTATGGGCCCAGAG
CGCTAAGCAAATAACTTCCCCCATTCCCTGGAATTTCTTTGCCCAGCTCTCCTCAGCGTGTGGTCCCTCT
GCCCCTTCCCCCTCCTCCCAGCACCAAGCTCTCTCCTTCCCCAAGGCCTCCTCAAATCCCTCTCCCACTC
CTGGTTGCCTTCCTAGCTACCCTCTCCCTGTCTAGGGGGGAGTGCACCCTCGTTAGACAGGCAGTGGGGT
CTGTGCTGACCGCCTGCTGACTGCCTTGCAGGTGAAATTGCCCTGTGGTCCTTGGTGGTCCTGGCCATCG
AGCGGTACGTGGTGGTGTGTAAGCCCATGAGCAACTTCCGCTTCGGGGAGAACCATGCCATCATGGGCGT
TGCCTTCACCTGGGTCATGGCGCTGGCCTGCGCCGCACCCCCCCTCGCCGGCTGGTCCAGGTAATGGCAC
TGAGCAGAAGGGAAGAAGCTCCGGGGGGCTCTTTGTAGGGTCCTCCAGTCAGGACTCAAGCCCAGTAGTGT
CTGGTTCCAGGCACTGACCTTGTATGTCTCCTGGCCCAAATGCCCACTCAGGGTAGGGGTGTAGGGCAGA
AGAAGAAACAGACTCTAATGTTGCTACAAGGGCTGGTCCCATCTCCTGAGCCCCATGTCAAACAGAATCC
AAGACATCCCAACCCTTCACCTTGGCTGTGCCCCTAATCCTCAACTAAGCTAGGCGCAAATTCCAATCCT
CTTTGGTCTAGTACCCCGGGGGGCAGCCCCCTCTAACCTTGGGCCTCAGCAGCAGGGGAGGCCACACCTT
CCTAGTGCAGGTGGCCATATTGTGGCCCCTTGGAACTGGGTCCCACTCAGCCTCTAGGCGATTGTCTCCT
AATGGGGCTGAGATGAGACACAGTGGGGACAGTGGTTTGGACAATAGGACTGGTGACTCTGGTCCCCAGA
GGCCTCATGTCCCTCTGTCTCCAGAAAATTCCCACTCTCACTTCCCTTTCCTCCTCAGTCTTGCTAGGGT
CCATTTCTTACCCCTTGCTGAATTTGAGCCCACCCCCTGGACTTTCTCCCCCATCTTCTCCAATCTGGCC
TAGTTCCATCCTCTGGAAGCAGAGCCGCTGGACGCTCTGGGTTTCCTGAGGCCCGTCCACTGTCACCAAT
ATCAGGAACCATTGCCACGTCCTAATGACGTGCCCTGGAAGCCTCTAGTTTCCAGAAGCTGCACAAAGAT
CCCTTAGATACTCTGTGTGTCCATCTTTGGCCTGGAAAATACTCTCACCCTGGGGCTAGGAAGACCTCGG
TTTGTACAAACTTCCTCAAATACAGAGCCTGAGGGCTCTCCCCACCTCCTCACCAACCCTCTGCCTGGCA
TAGCCCTAGCCTCAGCGGGCAGTGGATGCTGGGGCTGGGCATGCAGGGAGAGGCTGGGTGGTGTCATCTG
GTAACGCAGCCACCAAACAATGAAGCGACACTGATTCCACAAGGTGCATCTGCATCCCCATCTGATCCAT
TCCATCCTGTCACCCAGCCATGCAGACGTTTATGATCCCCTTTTCCAGGGAGGGAATGTGAAGCCCCAGA
AAGGGCCAGCGCTCGGCAGGCACCTTGGCTGTTCCCAAGTCCCTCACAGGCAGGGTCTCCCTACCTGCCT
GTCCTCAGGTACATCCCCGAGGGCCTGCAGTGCTCGTGTGGAATTGACTACTACACGCTCAAGCCGGAGG
TCAACAACGAGTCTTTTGTCATCTACATGTTCGTGGTCCACTTCACCATCCCCATGATTATCATCTTTTT
CTGCTATGGGCAGCTCGTCTTCACTGTCAAGGAGGTACGGGCCGGGGGGTGGGCGGCCTCACGGCTCTGA

GGGTCCAGCCCCCAGCATGCATCTGCGGCTCCTGCTCCCTGGAGGAGCCATGGTCTGGACCCGGGTCCCG
TGTCCTGCAGGCCGCTGCCCAGCAGCAGGAGTCGGCCACCACACAGAAGGCAGAGAAGGAGGTCACCCGC
ATGGTCATCATCATGGTCATCGCTTTCCTGATCTGCTGGGTGCCCTACGCCAGCGTGGCATTCTACATCT
TCACCCACCAGGGCTCCAACTTCGGTCCCATCTTCATGACCATCCCAGCATTCTTTGCCAAGAGCGCCGC
CATCTACAACCCTGTCATCTATATCATGATGAACAAGCAGGTGCCTACTGCGGGTGGGAGGGCCCCAGTG
CCCCAGGCCACAGGCACTGCCTGCCAAGGACAAGCTACGTCCCAGGGCAGGGGAGAGGGCTCCATCAGGG
CTACTGGCAGCAGTCTTGGGTCAGCAGTCCCAATGGGGAGTGTGTGAGAAATGCAGATTCCTGGCCCCAC
TAAGAACTGCTGAATCTCAGGGTGGGCCCAGGAACCTACATTTCCAGCAAGCCCTCCACAGGTGGCTCAG
ATGCTCACTCAGGTGGGAGAAGCTCCAGTCAGATAGTTCTGGAAGCCCAATGTCAAAGTCAGAAGGTCCC
AAGTCGGGAATGGGATGGGCCAGTCTCCATAAAGCTGAATAAGGAGCTAAAAAGTCTTATTCTGAGGGGT
AAAGGGGTAAAGGGTTCCTCGGAGAGGTACCTCCGAGGGGTAAACAGTTGGGTAAACAGTCTCTGAAGTC
AGCTCTGCCATTTTCTAGCTGTATGGCCCTGGGCAAGTCAATTTCCTTCTCTGTGCTTTGGTTTCCTCAT
CCATAGAAAGGTAGAAAGGGCAAAACACCAAACTCTTGGATTACAGGAGATAATTTACAGAACACCCTTG
GCACACAGAGGGCACCATGAAATGTCACGGGTGACACAGCCCCCTTGTGCTCGGTCCCTGGCATCTCTAG
GGGTGAGGAGCGTCTGCTTAGCAAGTTCCCTCTAGGAAGCTGGATTTGAGTGGATGGGGCACTGGAATCG
TGAGGGGCAGAAGCAGGGAAAGGGTCGGGGCGAACCTCACTAACGTGCCAGTTCCAAGCACACTGTGGGC
AGCCCTGGCCCTGACTCAAGCCTCTTGCCTTCCAGTTCCGGAACTGCATGCTCACCACCATCTGCTGCGG
CAAGAACCCACTGGGTGACGATGAGGCCTCTGCTACCGTGTCCAAGACGGAGACGAGCCAGGTGGCCCCG
GCCTAAGACCTGCCTAGGACTCTGTGGCCGACTATAGGCGTCTCCCATCCCCTACACCTTCCCCCAGCCA
CAGCCATCCCACCAGGAGCAGCGCCTGTGCAGAATGAATGAAGTCACATAGGCTCCTTAATTTTTTTTTT
TAAGAAATAATTAATGAGGCTCCTCACTCACCCGGGACAGCCTGAGAAGGGACATCCACCAAGACCTACT
GATCTGGAGTCCCAGGTTCCCCAAGGCCAGCGGGATATGTGCCCCTCCTCCTCCCAACTCATCTTTCAGG
AACACGAGGATTCTTGCTTTCTGGAAAAGTGTCCCAGCTTAGGGATAAGTGTCTAGCACAGAATGGGGCA
CACAGTAGGTGCTTAATAAATGCTGGATGGATGCAGGAAGGAATGGAGGAATGAATGGGAAGGGAGAACA
TATCTATCCTCTCAGACCCTCTTAGCAGCAGCAACTCATACTTGGCTAATGATATGGAGCAGTTGTTTTT
CCCTCCCTGGGCCTCACTTTCTTCTCCTATAAAATGGAAATCCCAGATCCCTGGTCCTGCCGACACGCAG
CTACTGAGAAGACCAAAAGAGGTGTGTGTGTGTCTATGTGTGTGTTTCAGCACTTTGTAAATAGCAAGAA
GCTGTACAGATTCTAGTTAATGTTGTGAATAACATCAATTAATGTAACTAGTTAATTACTATGATTATCA
CCTCCTGATAGTGAACATTTTGAGACTGGGCATTCAGACGATGGGGTTTCACCCAACCTTGGGGCAGGTT
TTTAAAAATTAGCTAGGCATCAAGGCCAGACCAGGGCTGGGGGTTGGGCTGTAGGCAGGGACAGTCACAG
GAATGCAGAATGCAGTCATCAGACCTGAAAAAACAACACTGGGGGAGGGGGACGGTGAAGGCCAAGTTCC
CAGTGAGGGTGAGATTGGGCCTGGGGTCTCACCCCTAGTGTGGGGCCCCAGGTCCCGTGCCTCCCCTTCC
CAATGTGGCCTATGGAGAGACAGGCCTTTCTCTCAGCCTCTGGAAGCCACCTGCTCTTTTGCTCTAGCAC
CTGGGTCCCAGCATCTAGAGCATGGAGCCTCTAGAAGCCATGCTCACCCGCCCACATTTAATTAACAGCT
GAGTCCCTGATGTCATCCTTATCTCGAAGAGCTTAGAAACAAAGAGTGGGAAATTCCACTGGGCCTACCT
TCCTTGGGGATGTTCATGGGCCCCAGTTTCCAGTTTCCCTTGCCAGACAAGCCCATCTTCAGCAGTTGCT
AGTCCATTCTCCATTCTGGAGAATCTGCTCCAAAAAGCTGGCCACATCTCTGAGGTGTCAGAATTAAGCT
GCCTCAGTAACTGCTCCCCCTTCTCCATATAAGCAAAGCCAGAAGCTCTAGCTTTACCCAGCTCTGCCTG
GAGACTAAGGCAAATTGGGCCATTAAAAGCTCAGCTCCTATGTTGGTATTAACGGTGGTGGGTTTTGTTG
CTTTCACACTCTATCCGCAGGATAGATTGAAACTGCCAGCTTCCACCTGATCCCTGACCCTGGGATGGCT
GGATTGAGCAATGAGCAGAGCCAAGCAGCACAGAGTCCCCTGGGGCTAGAGGTGGAGGAGGCAGTCCTGG
GAATGGGAAAAACCCCA

Felis Catus

>NC_058369.1:54022140-54027889 Felis catus isolate Fca126 chromosome A2, F.catus_Fca126_mat1.0, whole genome shotgun sequence

ATGAACGGGACGGAGGGCCCGAACTTCTACGTGCCCTTCTCCAACAAAACGGGTGTGGTACGCAGCCCCT
TCGAGTACCCACAGTACTACCTGGCTGAGCCATGGCAGTTCTCCATGCTGGCCGCCTACATGTTCCTGCT
CATCGTGCTTGGCTTCCCCATCAACTTCCTCACGCTCTACGTCACGGTCCAGCACAAGAAGCTGCGCACG
CCTCTCAACTACATCCTGCTCAACCTGGCCGTGGCTGACCTCTTCATGGTCTTCGGTGGCTTCACCACCA
CCCTCTACACCTCTCTGCATGGATACTTTGTCTTTGGGCCCACAGGATGCAATTTGGAGGGCTTCTTTGC
CACACTGGGCGGTAAGAACTGGTGTATGGGTGGCTGGCTGGGGGAGTCAGGAGTCAGCGGTGGGGAGGGT
GTGGAGGGATCTGGAGAGAACTCCATATTTGGGGATGGTGGTTAAGAGGCCTTCTCCCCTCTACATTCAT
CAGCGCTCTCCACTTAATCAACAAACACTGTCAGTAATGATAAGCTAGGCTGCCGGTTATTGAGGGCAGG
CATTGGACACTGTTTATCTCACATAGAATGGTGCCATTGTCTTGCTTTGCATCCGGGAAACTGAGGATGA
AAGAGTCAAGGGCCTTGCTGGGGCCACATTGTGGGAGGATAGAGCTGAGTTTCCAGCCCACATTTCTTTT
TTTCTTTTTTTTCTTTTTTTTTTTTTTTTAATTTTTTTTTCAACGTTTATTTATTTTTGGGACAGAGAGAG
ACAGAGCATGAACGGGGGAGGGGCAGAGAGAGAGGGAGACACAGAATGGGAAACAGGCTCCAGGCTCTGA
GCCAGCAGCCCAGAGCCCGACGCGGGGCTTGAACTCACGGACCGCGAGATCGTGACCTGGCCGAAGTCGG
ACGCTTAACCGACTGCGCCACCCAGGCGCCCCTCTTTTTTTATTTAAAAAAAAAAAAATTTGTTTTAACAT
TTATTGTCAAGAGACAGAGCACGAGCGGGGGAGGGGCAGAGAGAGAGGGAGACAGAATCCGAAGCAGGCT
CTAGGCTCTGAGCTGCCAGCACAGAGCCCAAAGCCAGTCTCGAACTCACAAACCGCGAGATCATGACCTG
AGCCAAAGTCGGACACTTAACCGACTGAGCCACCCAGGCGCCCCTAACATTTATTCATTTTTGAGAGAGA
GAGGGAGACAGAGCATGAGCGGGGGAGGAGGGGCGTGCAGAGAGAGGGAGACACAGAATCCCAAGCAGGC
TCCAGGCTCTGAGCTGTCGGCACAGAGCCTGATGCAGGGCTTGGACCCATAAACCATGAGATCATGACCT
GAGCCCACATTTCTGTGGCTCCTCAGGCCATGTTCTATTTCCCTCGGAGAAGCTGTGCCTTGTCAGACCC
ATGTTGGGCAGTGGGAATAGAGCCGGACAAGACAGATCTCTGTGCTCAGGGCTTTCAGACCGGGGTGGCA
CACAGATCATTAGTCCTCCAGCCACTGGACTTTGCCTGTGCTAAACAATGGGCTCAGTCTCTCCCCACCA
GTGTCTATCCCATCTTGCAGAGAAGGGTCCGCCTGTGTGTGGCAGCCCTATATCACTCCTACCTCGTGGC
CTGAGACTGGGTGATCTGTGACCATTGAAGGTGACAGACGCCCAGCAGTGGCCGGAGATTCCCCAGGCAT
GGGGCTGAGACAGTGTCCTGGACATGTGAAAGAGGGAGAAGACAAGGAGGCAGAACAGTCCTTGTGGCTG
GTGCTGGGCTCTCCCAGCCACCCTGGCTCTCTCCTGCTTGCCTGAGAGGCCATGTGTCCTCAGAGAAGGG
GGGCACTTCTGGATCTGAGCCAGGAGACCTAGGCCCTTGCCACTGCGCTGCCACATCCCTGAATGTGCCT
CTTCTCTCCTCCGTGCCTCGCTGTTCTCATCTACTAAACGGGATCTGTTATCTCTGCAGCAACCCCATCA
GTTTTCTAGTCAAAGGAACTATTTGATCGCACTTTTCAAAGCTACAGATCTCCACACAGGTCTAGTGCCT
CCCCTATGAAAGGGGTTTCTTGGAAGGGGATAAGCCCCCCACACACAATAAGGCTGGAGGTGGGTTGAGG
AGTCTCAGGCTAGAAGGCAGGGGTGAGATGGAGGCCACATGCAGGTAGGCACTTCTCTGCCGGGCTGGCA
TCAGTTTACAATTATTTTCCTGGAGTAATACTTAGTAGTGTTGTTTTTCTCTCTCAGAAATGTCCCGGTT
TGGTTGACAAATTCTATGGCTACCCTCCTGAGTGAGTTTCTGGGGTGATGTGTAGGGCAGTTGTCTGAAT
TCCACCATTCTTTCCTGCTTCTTCTTCTGGGCAAAACATTGCCCAGCTTTCTGGCTCCCAGGTGGGGACC
CACAGGCCCAGGTTATTTCATTCCCCACAGGGGAGAGGCTGCTGCACAAGAGGGAGAGCAGGAATTCTAG
CTCCAGCAGGCACTCTGCCTGTTGCCCCATGAAGTGCACATTCTTCTGCAAAAACTCCCTACAGGACTCC
TAGTCTAATCATGACCCTGGAATCTGATTTCCTGTCCTTCATGAACCCAGAGCTCTGACTGAACTAACTC
CTCTTCCTGGGAGGTCCCCGGTTCACTCTCTTCTCAGCATAATGCCTTTCTGCCTCACAGCCCCTTGGCT
CCTCTTCTCAGAATCGAAGCCCTCTCTTTCCCAAGTCCTGGCTCCAACTGTGCCTTAGGTGGCCTTCCTG
CCTGCCCTCTCCCATCCAGGAGGAGCGCTTCCTCTTTGGACAGTGGGGTCCAGGCAGGTGATGTGTTGAC
TGATAGCTGACTGCCTTGCAGGTGAAATTGCCCTGTGGTCTTTGGTGGTCCTGGCCATTGAGCGGTACGT
GGTGGTGTGTAAGCCCATGAGCAACTTCCGCTTTGGGGAGAACCATGCCATAATGGGCGTCGCCTTCACC
TGGGTCATGGCACTGGCCTGCGCTGCACCCCCTCTCGTTGGTTGGTCCAGGTAATGGCACTAAGCAGAAG
GGAAGGGTCCCTGGGGTGGGGGTTCTTTACAGGGTCCCCGGCCAGGACTCAAACCTGGGGCTGTCTCGTT
CTGGGCACTGAGCTTATATGTCCCCCACCCCGAACACCCACCCTGGCAGCTCTCCCAGGGTTGGGGTTTA
GGGTAGGGGAAGAGAGAATCAGACCCTAATGTTGCTCCAGGGGCTAGTGCCACCTCCTGGGCCCCATGTC
AAGGAGAATCCAAGACGCCCAACCCTTAACCTTGGCTGTGCCCCTAATCCTCAACTAAGCCAGGACCAGA
TTCCAATCCTCTTTGCCCCATAGGCAGCTCCCTCTGACCTTGGGCCTCAGCACCTGGGGAGGCCAAGCCT
ACCTAGTGCAGGTGGGTGACACTGTAGCCCCTGGGAACTGTGTCCTGTCCAGCCTCTAGTCCATCATCTG
CAAATGGGGCTCAGATGAGAGGTGGGAGGACAGTGGTTTGGGAAACTGGACGGGTGACCCTGTGGGTTCC
TGGAGGCCTCGTGTCCCGCTGCTTCTAGGAAATTCCCAATCTTTCTTCCCTTCCCTCCTCTCTCAGCTTC
CGGGGGTCAATTTTCTTTTTTATTTTACTTATTTATTTTTTTGTCCTTTGTTGAATCTGAGCCCATCGCC
TCCAGCCTCTTTCCCTGTTTTCTCCAGTCCTGCCCAGTCCCATCCCCACAGGCACAGCCAATAGACACTC
CATTGTCACCATCCTCTGAAATCACAGAAACATCCTAACCGTCTGTCCCTGGGACCTCTTGTTTCTCGAA
ACTGTGCAAAGATCCCTTAGTTACTCTGTGTGCCCATCTTTGGCCTAGAAAATACTCTTACCCTGTTAGT

AAGACCCTAGTTTGTACAAACTGCCTCAAATACAGAGCTTGGGGGCTTTTCCCGTCTCCCCACCAACCTC
TGCCTTGCACAGCCTGAGCCTCCAGCCACTAGAAGCAGCCAGTGTGGTGAGGAAACACAGCGCAGGTCCG
CGGTGTCCGGGCTCTGCTAGGCAAGAGACTGGGCCGTCTCATGATAGCATGGCTGTTTTCACAAGGGCAT
TTGAATCCCTCATCTCCATTGATTTGATCCTCACAGTCATGCAGCCATGCAGATATTTTATTATGCCTCT
TTTAAAGAGAGGGAAAGCGGGGCCCAGAGCAAGCCCAGCCACACAGCAGGTGTGTTGGGGGCCTGTTCCT
CAAGTCCCTCACATATGGGTCTCCCCGTGCCCTCTCTTGCCCTGTCCCCCTCTGGTGGTCAGGTACATCC
CTGAAGGCATGCAGTGTTCATGCGGGATCGACTACTACACACTCAAGCCAGAGGTCAACAACGAGTCCTT
TGTCATCTACATGTTCGTGGTCCACTTCACCATCCCCATGATCGTCATCTTCTTTTGCTACGGGCAGCTT
GTCTTCACAGTCAAGGAGGTATGGACCTGTGTTGGGTGCTGGGGACACATACATTGGTTGGGTTGAGCCT
GGCCTCTGTCCCAAAGGAGCCACAGTCTGGACAGCAGACCCTGTGTCCTTACAGGCGGCAGCCCAGCAGC
AGGAGTCAGCCACCACCCAGAAGGCTGAGAAGGAGGTCACTCGCATGGTCATCATCATGGTCATTGCTTT
CCTGATCTGTTGGGTGCCCTACGCCAGCGTGGCATTCTACATCTTCACCCACCAGGGCTCCAACTTTGGC
CCCATCTTCATGACACTCCCGGCGTTCTTCGCCAAGTCCTCCTCCATCTACAACCCTGTCATCTACATCA
TGATGAACAAGCAGGTGCCTGCTGGCGGGGCGGAAGGGTCCAGGGGCCCCAGGCTGCAGGCATTGCCTGC
GGAGGACAAGCCATGTCCTTGACTGGGCCTCAGTCGTTTCACCTGCAAAACTAGGCAGGGAAACTGGTAT
CCCCCAGAGCATCAGAGTCATCTAGGAGAAATGCAGATTCCTGCTGAATCAGAAGCTCAGAGTGAGCCCA
GGAACCTGCATTTCTAACAAGCCTACCAGGTGACTGTCACACTGGCTCAAGTATGAGAAGTGCCAGTCCA
GACGGTTCTGGAGGCCCACTTTAAAAATCAAATGGTCTAAGTCCCAAGCCTGGGAATGGGATGGGGCCAG
TCTCCACAAAGCTGAACAAGGAGCTAAAGTCTTATTCTGAGGGAGGAAGGGATAAAGCAGTTCTTTAACA
CCAACCAGTGACTTCTCTGCAGAATCCATGAACCTGTGGGGGAAAACATGGTCTCTAGAGTTAGGCATAT
TGGTTTCAAATCCCAGTTCTTCTTTTTTAAGCTGATTGACACTTGGGAAGTCACTTCCCTTCTCCGGGCT
TCAGTGTCTGTGTTCCTAGAGAGGGCAAAATCCCAAACTTGAGGGCTATATAAGGTACTTACAGATAGCC
CTTGGCACACAGAGGGCATCAGGGAATGTCATCAGTAGCAGAGCCCTCTTGGGTTTGGTCCCTGGCATCT
CTGGGGTGGGGCCACATGAACTTACTAAATTCCCTCCAGGAAGCCAGATTTGAGAGGGAGTGGAGGCTGT
GAGAGCCAGAAGCAGGGAAGGGGTTGGAGGTAAATCTCGCCAACCACTCCAGTTTGCTACACACACTTTC
GGTGGACCCTGATTCTGACTCACGCTCTTTGCCTTCCAGTTCCGGAACTGCATGCTCACTACCCTCTGCT
GTGGCAAGAACCCACTGGGTGATGACGAGGCCTCCACCACCGCCTCCAAGACGGAGACCAGCCAGGTGGC
ACCGGCCTAA