```
                                 (((((((..(((.........)))((((.((.......)).))).....)))).... 
chr-10.trna2-Ser-GCT             GGAGAGAUGGCUGAGUGGACUAAAGUGGCGGAUUGCUAAUCCGUU------GUACGAUUU 54
chr-10.trna21-Ser-GGA            GGAGAGAUGGCCGAGUGGUUGAAGGCGUAGCAUUGGAACUGCUAU------GUAGGC-UU 53
chr-7.trna1-Ser-TGA              GGAUGGAUGUCUGAGCGGUUGAAAGAGUCGGUCUUGAAAACCGAA------GUAUUG-AU 53
chr-2.trna66-Ser-GCT             GGAGGUAUGGCUGAGUGGCUAAAGGCAUUGGUUUGCUAAAUCGAC------AUACAAGAA 54
chr-4.trna6-Ser-GCT              GGAGGUAUGGCUGAGUGGCUAAAGGCAUUGGUUUGCUAAAUCGAC------AUACAAGAA 54
chr-6.trna9-Ser-GCT              GGAGGUAUGGCUGAGUGGCUAAAGGCAUUGGUUUGCUAAAUCGAC------AUACAAGAA 54
chr-9.trna28-Ser-GCT             GGAGGUAUGGCUGAGUGGCUAAAGGCAUUGGUUUGCUAAAUCGAC------AUACAAGAA 54
chr-2.trna65-Ser-GCT             AGAGAGAUAGCUGAGUGAACUAAAGCAUCAGAUUGCUAAUCCACUG-----UACAAG-UU 54
chr-10.trna56-Ser-GCT            GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCUUGCUAAGU-ACA------UGGGG---- 48
chr-1.trna75-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-2.trna50-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-7.trna71-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-10.trna58-Ser-GCT            GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-4.trna52-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-4.trna59-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-4.trna60-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-4.trna62-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-9.trna61-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-7.trna58-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-7.trna8-Ser-GCT              GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGA---- 48
chr-2.trna26-Ser-GCT             GUUGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-4.trna61-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-5.trna70-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGA---- 48
chr-3.trna82-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-1.trna76-Ser-GCT             GUCGCUUUGGCCGAGUGGUUAAGGCGUGU-GCCUGCUAAGU-ACA------UGGGG---- 48
chr-3.trna81-Ser-GCT             GUUGCUUUGGCCGAGUGGUUAAGGCGUGC-CCCUGCUAAGU-ACA------UGGGG---- 48
chr-11.trna32-Ser-GCT            GUUGCUUUGGCCGAGUGAUUAAGGCAUGUGGCCUGCUAAGU-ACA------UGGGG---- 49
chr-5.trna47-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-10.trna32-Ser-AGA            GUGGGUGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-5.trna114-Ser-AGA            GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-5.trna115-Ser-AGA            GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-6.trna31-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-6.trna88-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna62-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna65-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna66-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-3.trna28-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-3.trna30-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna45-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna63-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-6.trna32-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-6.trna91-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GACUAGAAAUC-AUG------UGGGC---- 48
chr-7.trna61-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAUCGGGCAU-GAUUAGAAAUC-AUG------UGGGC---- 48
chr-5.trna52-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-11.trna26-Ser-TGA            GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-5.trna28-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-10.trna41-Ser-TGA            GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-1.trna61-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-8.trna16-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-4.trna94-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-5.trna53-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-5.trna11-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-9.trna38-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGAUA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-7.trna59-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGGC---- 48
chr-2.trna52-Ser-CGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUCGAAAUC-UGU------UGGGC---- 48
chr-2.trna89-Ser-CGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUCGAAAUC-UGU------UGGGC---- 48
chr-3.trna116-Ser-CGA            GUCAAUAUGUCCGAGUGGUUAAGGAGACA-GACUCGAAAUC-UGU------UGGGC---- 48
chr-3.trna118-Ser-CGA            GUCAAUAUGUCCGAGUGGUUAAGGAGACA-GACUCGAAAUC-UGU------UGGGC---- 48
chr-5.trna51-Ser-TGA             GUCGAUAUGUCCGAGUGGUUAAGGAGACA-GACUUGAAAUC-UGU------UGGCC---- 48
chr-2.trna93-Ser-GCT             GUUGCUUUGGCCGAGUGGUUAAGUCUUGU-GCCUGCUAAGU-ACA------U-GGG---- 47
chr-7.trna64-Ser-AGA             GUGGGCGUGCCAAAGUGGUUAUCUGGCAU-GACUAGAAAUC-ACG------UGGGC---- 48
chr-1.trna21-Ser-AGA             GUGAGUGUGCUAGAGUGGUUAUUGGGCAU-CACUAGAAAUC-AUG------UGGGC---- 48
chr-3.trna117-Ser-CGA            GUUAAUAUGUCCGAGUGGUUAAGAAGACA-GACUCGAAAUC-UGU------UGGGC---- 48
chr-7.trna4-Ser-CGA              GUCGAUAUGUCCGAGUGGUUA--AGGAGA-GACUCGAAAUC-UGU------UGGGC---- 46
chr-3.trna134-Ser-GCT            GUCGCUUUGGCCGAGU-CUUAAGGC-GUGUGCCUGCUAAGUACAUGGAUUUUCCUGAAGG 58
chr-3.trna34-Ser-AGA             GUGGGCGUGCCGGAGUGGUUAAUCGGGCAU-GACUAGAAAUC-UUG------UGAGC---- 48
chr-5.trna131-Ser-AGA            GUGGGCGUGCCGGAGUGGUUAUUGGGCAU-GACUAGAAAUC-AUG------UGGG----- 47
chr-9.trna47-Ser-GCT             GCACCAGUGGUCUAGUGGUAGAAUAGUAC--CCUGCUAC-------------------- 37
                                 .........10.........20.........30.........40.........50.........
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                                 ...)))))..(((((.......)))))))))))). 
chr-10.trna2-Ser-GCT             UUUUGUACCGAGGGUUCGAAUCCCUCUCUUUCCG 88
chr-10.trna21-Ser-GGA            UUGUUUACCGAGG-UUCGAAUCCCUCUCUUUCCG 86
chr-7.trna1-Ser-TGA              AGGAAUACCGGGGGUUCGAAUCCCUCUCCAUCCG 87
chr-2.trna66-Ser-GCT             GAUUGUAUCAUGGGUUCUCAUCCCAUUUCCUCCG 88
chr-4.trna6-Ser-GCT              GAUUGUAUCAUGGGUUCUCAUCCCAUUUCCUCCG 88
chr-6.trna9-Ser-GCT              GAUUGUAUCAUGGGUUCUCAUCCCAUUUCCUCCG 88
chr-9.trna28-Ser-GCT             GAUUGUAUCAUGGGUUCUCAUCCCAUUUCCUCCG 88
chr-2.trna65-Ser-GCT             UUUUUGUACGACGGUUCAAAUCCCUCUCUUUCUG 88
chr-10.trna56-Ser-GCT            UUUCCCCGCGAGAGUUCGAAUCUCUCAGGUGACG 82
chr-1.trna75-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-2.trna50-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-7.trna71-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-10.trna58-Ser-GCT            UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-4.trna52-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-4.trna59-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-4.trna60-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-4.trna62-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-9.trna61-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-7.trna58-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-7.trna8-Ser-GCT              UUUUCCCGCGAGAGUUCGAAUCUCUCAGGCGACG 82
chr-2.trna26-Ser-GCT             UUUCCCCGCGAGAGUUCGAAUCUCUCAGGCAACG 82
chr-4.trna61-Ser-GCT             UUUCCCCGCGAGAGUUCGAGUCUCUCAGGCGACG 82
chr-5.trna70-Ser-GCT             UUUCUCCGCGAGAGUUCGAAUCUCUUAGGCGACG 82
chr-3.trna82-Ser-GCT             UUUCCCUAUGAGAGUUCGAAUCUCUUAGCUGACG 82
chr-1.trna76-Ser-GCT             UUUCUUCGCGAGAGUUCGAAUUUCUUAGGCGACG 82
chr-3.trna81-Ser-GCT             UUUCCCUGCGAGAGUUUGAAUCUCUCAGGCGACG 82
chr-11.trna32-Ser-GCT            UUUCUCCGUGAGAGUUUGAAUCUCUCAAGCGACG 83
chr-5.trna47-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-10.trna32-Ser-AGA            UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-5.trna114-Ser-AGA            UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-5.trna115-Ser-AGA            UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-6.trna31-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-6.trna88-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna62-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna65-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna66-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-3.trna28-Ser-AGA             UUUGCCCGCGCAGGUUCGAAUCCUGCCGUUCACG 82
chr-3.trna30-Ser-AGA             UCUGCCCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna45-Ser-AGA             UCUGCUCGCGCAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna63-Ser-AGA             UUUGCCUGCGCAGGUUCAAAUCCUGCCGCUCACG 82
chr-6.trna32-Ser-AGA             UUUGCCCGCGUAGGUUCGAAUCCUGCCGCUCACG 82
chr-6.trna91-Ser-AGA             UUUGCCCGCGUAGGUUCGAAUCCUGCCGCUCACG 82
chr-7.trna61-Ser-AGA             UUUGCCAGUGCAGGUUUGAAUCCUGCCGCUCACG 82
chr-5.trna52-Ser-TGA             UUCGUCCGCGCAGGUUCGAACCCUGCCGUUGACG 82
chr-11.trna26-Ser-TGA            UACGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-5.trna28-Ser-TGA             UUUGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-10.trna41-Ser-TGA            UUUGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-1.trna61-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-8.trna16-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-4.trna94-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-5.trna53-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-5.trna11-Ser-TGA             UUCGCCCGGGCAGGUUCGAACCCUGCCGUCGACG 82
chr-9.trna38-Ser-TGA             UUUGCCCGCGCAGGUUCGAACCCUGCCGUCGACG 82
chr-7.trna59-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCAUGCCGUCGACG 82
chr-2.trna52-Ser-CGA             UUUGCCUGCGCAGGUUCGAAUCCUGCCGUCGACG 82
chr-2.trna89-Ser-CGA             UUUGCCUGCGCAGGUUCGAAUCCUGCCGUCGACG 82
chr-3.trna116-Ser-CGA            UUUGCCUGCGCAGGUUCGAAUCCUGCCGUUGACG 82
chr-3.trna118-Ser-CGA            UUUGCCUGCGCAGGUUCGAAUCCUGCCGUUGACG 82
chr-5.trna51-Ser-TGA             UUCGCCCGCGCAGGUUCGAACCCUGCCGUCGUCG 82
chr-2.trna93-Ser-GCT             UUUCUUUGCGAGGGUUCGAAUCUCUUAGGCAAUG 81
chr-7.trna64-Ser-AGA             UUUGCUCGCGCAGGUUUGAAUCAUGUCGCUCACG 82
chr-1.trna21-Ser-AGA             UUUGCCUGUGUAGGUUUGAAUCCUGUCGCUCACG 82
chr-3.trna117-Ser-CGA            UAUGCCUGCGUAGGUUCGAAUUCUGUUGUUGACG 82
chr-7.trna4-Ser-CGA              UUUGCCUGCGCAGGUUCGAAUCCUGCCGUUGACG 80
chr-3.trna134-Ser-GCT            UUUCCCCGCGAGAGUUCGAAUCUCUCAGUCGACG 92
chr-3.trna34-Ser-AGA             UUUGCCCGC-----UUCGAAUCCUGCCGCUCACG 77
chr-5.trna131-Ser-AGA            --------------UUCGAAUCCUGCCGUUCACG 67
chr-9.trna47-Ser-GCT             UGUACAGACCCGGGUUCGAUUCCCGGCUGUUGCA 71
                                 .........70.........80.........90...
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