```
                                (((.....((((.(((((.........)))))(((((.......)))))...((.(((..
chr-1.trna256-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna223-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna224-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna244-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna258-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-7.trna22-Asp-GTC    GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna259-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-6.trna321-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna260-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna291-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna322-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna324-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna325-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-4.trna219-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna327-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna354-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna355-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna387-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna475-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-7.trna434-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna147-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna388-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna567-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna112-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-7.trna54-Asp-GTC    GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-2.trna125-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna21-Asp-GTC    GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna20-Asp-GTC    GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-2.trna505-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-2.trna369-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-7.trna408-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-C 53
chr-1.trna366-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-3.trna129-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGA-U 53
chr-2.trna50-Asp-GTC    GUA-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna430-Asp-GTC   GUC-----AUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCAGG-U 53
chr-1.trna323-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUUCCGCCUGUCACGCGGGUGACCCGGGGU 54
chr-4.trna264-Asp-GTC   GUC-----GUUGUA-UAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 52
chr-7.trna475-Asp-GTC   GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGUCUGUCACGCGGGUGACACGGU-U 53
chr-7.trna26-Asp-GTC    GUC-----GUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGGG-U 53
chr-1.trna257-Asp-GTC   GUC-----AUUGUAGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGGGGUGACCCGGG-U 53
chr-3.trna57-Asp-GTC    GUC-----GUUGUGGUAUAG-UGGUAAGUAUUCCCGCCUGUCACGUGGGUGACCCGGG-U 53
chr-7.trna476-Asp-GTC   GUU-----GUUGCAGUAUAG-UGCUAAGUAUUCCCGCCUGUCACCCGGGUGACCCGGG-U 53
chr-7.trna25-Asp-ATC    GUC-----GUUGUAGUAUAG-UUGUAAGUAUUGCCGCCUAUCACGCGGGUGGCCCUGG-U 53
chr-7.trna477-Asp-GTC   GUC-----GUUGUAGUAUAG-UG-UAAGUAUUCCCGCCUGUCAUGCGGGUGACCAGUG-U 52
chr-1.trna255-Asp-GTC   GUC-----GUUGUAG--UAG-UGGUAAGUAUUCCCGCCUGUCAUGCGGGUGACCCGGG-U 51
chr-7.trna432-Asp-GTC   ACCAAGUGGUUGUAGUAUAG-UG-UAAGUAUUACCGCCUGUCACGCGGGUGACCCGGG-U 57
chr-1.trna189-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCAAGAAGUCGCGGGU 55
chr-7.trna285-Asp-GTC   UGG----G-AUAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-3.trna11-Asp-GTC    GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCACGGGU 55
chr-7.trna446-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-2.trna225-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-5.trna276-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-6.trna84-Asp-GTC    GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-7.trna110-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-3.trna217-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGUUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-3.trna136-Asp-ATC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUAUCACGCCAGAAGUCGCGGGU 55
chr-6.trna324-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-4.trna212-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUACAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-3.trna109-Asp-GTC   GGG----G-AAAUAGCUCAGUUGGUUAGAGUGUUGGUCUGUCACGCCAGAAGUCGCAGGU 55
chr-2.trna95-Asp-GTC    GGG----G-AAAUAGUUCAGCUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCACGGGU 55
chr-5.trna389-Asp-GTC   GGG----GUAAAUAGCUCGGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 56
chr-4.trna97-Asp-GTC    GUU----G-AAAUAGCUCAGUUGGUUAGAGUGCUGGUCUGUCACGCCAGAAGUCGCGGGU 55
chr-1.trna545-Asp-GTC   GGG----A-UUGUAGUUCAAUUGGUCAGAGCACCGCCCUGUCAAGGCGGAAGCUGCGGGU 55
chr-5.trna2-Asp-GTC     GGG----A-UUGUAGUUCAAUUGGUCAGAGCACCGCCCUGUCAAGGCGGAAGCUGCGGGU 55
chr-2.trna7-Asp-GTC     GGG----A-UUGUAGUUCAAUUGGUCAGAGCACCGCCCUGUCAAGGCGGAAGUUGCGGGU 55
chr-7.trna28-Asp-GTC    GGG----A-UUGUAGUUCAAUUGGUCAGAGCACCGCCCUGUCAAGGCGGAAGUUGCGGGU 55
chr-4.trna16-Asp-GTC    GGG----A-UUGUAGUUCAAUUGGUCAGAGCACCGCCCUGUCAAGGCGGAAGCUGCGGGU 55
chr-1.trna46-Asp-GTC    GGG----G-AAAUAGCUCAGUUGGUUAGAGUGAUGGUCUGUCAUGCCAGAAGUCGCGGGU 55
chr-4.trna134-Asp-ATC   GGG-----AUUGUAGUUCAAUUGGUCAGAGCACCGCCCUAUCAAGGCGGAAGCUGCGGGU 55
                                .........10........20........30........40........50.........
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                                .....))).)))))))).........)).
chr-1.trna256-Asp-GTC   UCGAUCCCCAGCAACG---------GCG 72
chr-1.trna223-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna224-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna244-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna258-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-7.trna22-Asp-GTC    UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna259-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-6.trna321-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna260-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna291-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna322-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna324-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna325-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-4.trna219-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna327-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna354-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna355-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna387-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna475-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-7.trna434-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna147-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna388-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna567-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna112-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-7.trna54-Asp-GTC    UCGAUCCCCGGCAACG---------GCG 72
chr-2.trna125-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna21-Asp-GTC    UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna20-Asp-GTC    UCGAUCCCCGGCAACG---------GCG 72
chr-2.trna505-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-2.trna369-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-7.trna408-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna366-Asp-GTC   UUGAUCCCCGGCAACG---------GCG 72
chr-3.trna129-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-2.trna50-Asp-GTC    UCGAUCCCCGGCAACG---------GCG 72
chr-1.trna430-Asp-GTC   UCGAUACCCGGCAAUG---------GCG 72
chr-1.trna323-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 73
chr-4.trna264-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 71
chr-7.trna475-Asp-GTC   UUGAUCCCCGGCAACG---------GCG 72
chr-7.trna26-Asp-GTC    UCGAUCCCCGGCACCG---------GCC 72
chr-1.trna257-Asp-GTC   UCGAUCCCCGGCAACG---------GCG 72
chr-3.trna57-Asp-GTC    UUGAU-CCUGGCAACG---------GCG 71
chr-7.trna476-Asp-GTC   UUAAUCCACGGCAACA---------ACG 72
chr-7.trna25-Asp-ATC    UCGAUCUCCGGCAACG---------GCG 72
chr-7.trna477-Asp-GTC   UCGAUCACCGGCAACG---------GUG 71
chr-1.trna255-Asp-GTC   UCGAUCCCCGGCACUA---------ACA 70
chr-7.trna432-Asp-GTC   UCGAUCCCCGGCAACG---------GUU 76
chr-1.trna189-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-7.trna285-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-3.trna11-Asp-GTC    UCGAACCCUGUUUUCC---------CCG 74
chr-7.trna446-Asp-GTC   UCGAACCCUGUUUUCC---------CCG 74
chr-2.trna225-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-5.trna276-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-6.trna84-Asp-GTC    UCGAACCCCGUUUUCC---------CCG 74
chr-7.trna110-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-3.trna217-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-3.trna136-Asp-ATC   UCGAACCCCGUUUUCC---------CCG 74
chr-6.trna324-Asp-GTC   UCUAACCCCGUUUUCC---------CCG 74
chr-4.trna212-Asp-GTC   UCGAACCCUGUUUUCC---------CCG 74
chr-3.trna109-Asp-GTC   UCGAACCCCGUUUUCC---------CCG 74
chr-2.trna95-Asp-GTC    UUGAACCCCGUUUUCC---------CCA 74
chr-5.trna389-Asp-GTC   UCGAACCCCGUUUUCC---------CCA 75
chr-4.trna97-Asp-GTC    UCGAACCCCGUUUCCG---------CCC 74
chr-1.trna545-Asp-GTC   UUGAGCCCCGUCAGUC---------CCG 74
chr-5.trna2-Asp-GTC     UCGAGCCCCAUCAGUC---------UCG 74
chr-2.trna7-Asp-GTC     UCGAGCCCCGUCAGUC---------CCG 74
chr-7.trna28-Asp-GTC    UCGAGCCCCGUCAGUC---------CCG 74
chr-4.trna16-Asp-GTC    UCAAGCCCCGUCAGUC---------CCG 74
chr-1.trna46-Asp-GTC    UCGAACCCCGUUUCCCUA-------CCG 76
chr-4.trna134-Asp-ATC   UCGAGCCCCGUCGGCGAACUCGACUCCA 83
                                .........70........80.......
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