```
                                 (((((((.......((((..........)))).(((((.......)))))).....(((((
chr-12.trna251-Arg-TCT    UGUUGGCGCCCAUGG--CAA-UGGAUAAGGCG-CUUGACUUCUAAUCAAGCGAUUGUGGG 56
chr-16.trna22-Arg-ACG     GGGUGGGGCCUGUAGCUCAG-AGGAUUAGAGCACGUGGCUACGAACCACGGUGUCGGGGG 59
chr-1.trna36-Arg-CCT      GUGCUUG-----UAGCUCAG-UGGA-UUGAGCGUUUGUUUCCUAAGCAGAAAGUCAUAGG 53
chr-1.trna35-Arg-CCT      GUGCCUG-----UAGCUCAG-UGGA-UUGAGCGUUUGUUUCCUAAGCAGAAAGUCAUAGG 53
chr-8.trna79-Arg-CCT      GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-9.trna253-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCAUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-5.trna255-Arg-CCT     GCGUUUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-16.trna78-Arg-CCT     GCGUUUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-10.trna266-Arg-CCT    GCGUUUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-9.trna21-Arg-CCT      GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUUGUAGG 53
chr-9.trna22-Arg-CCT      GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUUGUAGG 53
chr-15.trna23-Arg-CCT     GCGCUUG-----UAGCUCAG-UGGA-UAGAGCAUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-3.trna69-Arg-CCT      GCGUUUG-----UAGCUCAG-UGGA-UAGAGUGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-15.trna22-Arg-CCT     GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-3.trna104-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-1.trna136-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-15.trna70-Arg-CCT     GCGCUUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-3.trna106-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-6.trna110-Arg-CCT     GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-15.trna71-Arg-CCT     GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-9.trna252-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-9.trna258-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-1.trna29-Arg-CCT      GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAGGUCGUAGG 53
chr-6.trna68-Arg-CCT      GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAGGUCGUAGG 53
chr-9.trna26-Arg-CCT      GCGUUUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-7.trna89-Arg-CCT      GCGUUUG-----UAGCUCAA-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGG 53
chr-13.trna364-Arg-CCT    GUGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGUAGAAAGUUGUAGG 53
chr-6.trna109-Arg-CCT     GCGCUUG-----UAGCUCAG-UGGA-UAGAGCAUCUGUUUCCUAAGCAGAAGGUCGUAGG 53
chr-1.trna188-Arg-CCT     GCGUCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCUUAGG 53
chr-1.trna276-Arg-CCT     GCGCCUG-----UAGUUCAG-UGGA-UAGAGCAUCUGUUUCCUAAGCAGAAAGUCAUAAG 53
chr-13.trna365-Arg-CCT    GCGUUUG-----UAGCUCAG-UGGA-UAGAGCAUUUGUUUCCUAAGUAGAAAGUCGUAGG 53
chr-7.trna77-Arg-CCT      GCGCCUG-----UAGCUCAG-UGGA-UAGAGCGUCUGUUUCCUAAGCAAAAAGUCGUAGG 53
chr-15.trna21-Arg-CCT     GCGUUUG-----UAGCUCAG-UGGA-UAGAGCGUCUAUUUCCUAAGCAGAAAGUUGUAGG 53
chr-10.trna265-Arg-CCT    GCAUCUG-----UAGCUCAG-UGGA-CAGAGCGUCUGUUUCCUAAGUAGAAAGUUGUACG 53
chr-1.trna186-Arg-CCT     GCGUUUG-----UAAGUCAG-AGGA-UAGAGCGUUUGUUUCCUAAACAGAAAGUCGUAGG 53
chr-6.trna101-Arg-TCT     GCGCUCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGAG 53
chr-4.trna119-Arg-TCT     GCGCCUA-----UGGCCUAA-UGGA-UAAGGCACUUGACUUCUAAUCAAGGGAUUGUGGG 53
chr-14.trna22-Arg-TCT     GCGCUCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-6.trna47-Arg-TCT      GCGCCUA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-6.trna31-Arg-TCT      GCGCCUA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-2.trna58-Arg-TCT      GCGCCCA-----UGGCCUAA-UGGA-UAAGGUGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna244-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGUGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-4.trna107-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-14.trna40-Arg-TCT     GCGCUCG-----UGGCCUAA-UGGA-UAAGGCGCUGACUUCUAAUCAGGCGAUUGUGGG 53
chr-4.trna126-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-15.trna56-Arg-TCT     GCGCUCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-4.trna139-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna188-Arg-TCT     GCGCUCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna191-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna192-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-9.trna19-Arg-TCT      GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-10.trna138-Arg-TCT    GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-10.trna314-Arg-TCT    GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-10.trna315-Arg-TCT    GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-11.trna52-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-12.trna196-Arg-TCT    GCGCCUG-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAACGAUUGUGGG 53
chr-1.trna181-Arg-TCT     GCGCCCG-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-14.trna66-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-1.trna268-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna230-Arg-TCT     GCACCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-5.trna243-Arg-TCT     GCGCCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-9.trna20-Arg-TCT      GCGCCCA-----UGGCCUAA-UAGA-UAAGGCGCUUGACUUCUAAUCAAGUGAUUGUGGG 53
chr-3.trna37-Arg-TCT      GUGCCUG-----UGGCCUAA-UGGA-UAAGGUGCUUGACUUCUAAUCAAAUGAUUGUGGG 53
chr-9.trna113-Arg-TCT     GCGUCCA-----UGGCCUAA-UGGA-UAAGGCGCUUGACUUCUAAUCAAGCGAUUGUGGG 53
chr-3.trna28-Arg-CCG      GUUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-12.trna195-Arg-CCG    GUUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-15.trna47-Arg-CCG     GGUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-12.trna194-Arg-CCG    GUUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-6.trna23-Arg-CCG      GAUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-15.trna49-Arg-CCG     GUUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGACUGUGGG 53
chr-8.trna59-Arg-TCG      GUUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-1.trna263-Arg-CCG     GGUCGCG-----UGGCCUAA-UGGA-UAAGGCGUCGCCUCCGGAGCGGGAGAUUGUGGG 53
chr-6.trna22-Arg-TCT      AUGCCCG-----UGGCUUAA-UGGA-UAAGGCACUUGACUUCUAAUCAAGCAAUUGUGGG 53
chr-9.trna247-Arg-TCT     GCGCCCA-----UGACUUAA-UGGA-UAAGGUGCUUGACUUCUAAUCAAGCGAUUGUCGG 53
chr-3.trna36-Arg-TCG      GGCUGCA-----UAGCGCAG-UGGAUUAGCGUGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-9.trna54-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUUUGACUUCGGAUCAAAAGGUCGUGGG 54
chr-5.trna22-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUUUGACUUCGGAUCAAAAGGUCGUGGG 54
chr-7.trna198-Arg-TCG     GGCCGCA-----UAGCGCAG-UGGAUUAGCGCGUUUGACUUCGGAUCAAAAGGUCGUGGG 54
chr-4.trna84-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-15.trna59-Arg-TCG     GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-9.trna57-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-14.trna98-Arg-TCG     GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-7.trna12-Arg-TCG      GGCUACA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-3.trna61-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUAACUUCGGUUCAGAAGGUCGUUGG 54
chr-9.trna56-Arg-TCG      GACCGCA-----UAGCGCAG-UGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGG 54
chr-5.trna248-Arg-CCG     GAUCGCA-----UAGCGAAG-UGGA-UAUCGUGUUAGACUCCGGAUCUAAAGGUCGUGGG 53
chr-2.trna52-Arg-CCT      GCCUCCG-----UAGCAUAG-UGG--UAGUGCGUUCGCUACCUAAGCGAAAGGUCGCGAG 52
chr-13.trna48-Arg-TCT     GCCAUCU-----UACCUCAG-UGG--UAGAGCGGUGGCUUCUAACCACGUGGUCGUGGG 52
chr-1.trna152-Arg-ACG     GACUCUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-1.trna182-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-15.trna14-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-10.trna88-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-10.trna93-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-14.trna90-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-14.trna63-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-3.trna115-Arg-ACG     GACUCUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-7.trna218-Arg-ACG     GACUCUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-12.trna64-Arg-ACG     GACUCUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-8.trna37-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-8.trna38-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-1.trna183-Arg-ACG     GACUCCA-----UGGCCCAA-UGGA-UAAGGCGCUAGCCUACGGAGCUAGAGAUUCUGGG 53
chr-8.trna32-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGACAUUCUGGG 53
chr-7.trna217-Arg-ACG     GACUCUG-----UGGCCCAA-AGGA-UAAGGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-11.trna429-Arg-ACG    GACUCCA-----UGGCCCAA-UGAA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna30-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGGGAUUCUGGG 53
chr-8.trna51-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAAGGCGCGGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna33-Arg-ACG      GACUUUG-----UGGCCCAA-UGGA-UAACGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-8.trna39-Arg-ACG      GACUUUG-----UCGCCCAA-UGGA-UAAGGAGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna40-Arg-ACG      GACUUUG-----UCGCCCAA-UGGA-UAAGGAGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna53-Arg-ACG      GACUUUG-----UCGCCCAA-UGGA-UAAAGCGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-8.trna35-Arg-ACG      GACUUUG-----UCGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna36-Arg-ACG      GACUUUG-----UCGCCCAA-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna34-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna44-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna49-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna45-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna43-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-8.trna42-Arg-ACG      GACUUUG-----UGGCCCAU-UGGA-UAAUGCGCUAGUCUACGAAACCAGAGAUUCUGGG 53
chr-1.trna31-Arg-ACG      GACUUCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna118-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna120-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna122-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna121-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna123-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna117-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna124-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-12.trna116-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUAGG 53
chr-2.trna162-Arg-ACG     GACUUUG-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-12.trna125-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-12.trna126-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGGUGCUGGUCUACGGAACCAGAGAUUCUGGG 53
chr-1.trna177-Arg-ACG     GACUUUA-----UGGCCCAA-UGGA-UAAGGCGCUGGUCUACGGAACCAGACAUUCUGGG 53
chr-12.trna119-Arg-ACG    GACUCCA-----UGGCCCAA-UGGA-UAAGAUGCUGGUUUACGGAACCAGAGAUUCUGGG 53
chr-8.trna41-Arg-ACG      GACUUUG-----UGGCGCAU-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUAGG 53
chr-8.trna46-Arg-ACG      GACUUUG-----UGGCGCAU-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUAGG 53
chr-8.trna47-Arg-ACG      GACUUUG-----UGGCGCAU-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUAGG 53
chr-8.trna48-Arg-ACG      GACUUUG-----UGGCGCAU-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUAGG 53
chr-8.trna50-Arg-ACG      GACUUUG-----UGGCGCAU-UGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUAGG 53
chr-8.trna54-Arg-ACG      GACUUUG-----UGUUCAAA-UGGA-UAAGGCGCUGGUUUACGGUACCAGAGAUUCUGGG 53
chr-8.trna90-Arg-TCT      GUGUUUG-----UAGUCCAA-U-GAUUAGGAUAAUUGCCUUCUAAGCAAUGGGAACCUGU 53
chr-5.trna246-Arg-TCT     GUGCCCA-----UGGCUUAA-UGGA-UAAGGCGUUGACUUCUAAUCAAGUGGUUGUGGG 53
chr-1.trna28-Arg-TCT      GCCCUUA-----UAGCUCAG-UGG--UAGAGCGUCAGUCUUCUAAACUGAAGGUCUGUA- 51
chr-1.trna184-Arg-ACG     GACUCCA------UGCCCAA-UGGA-UAAGGCGCUAGCCUACGAAGUUAGAGG------- 45
chr-13.trna313-Arg-ACG    GUGGAUG-----UGGCCGAGUUGGUCUAAGGCGCCAGAUUACGGUUCUGGUCUGAAAGGG 55
chr-13.trna8-Arg-TCT      GCUAUGGUUCUUACAGAGUAAUGGA-UAGGGUAGAGGUCUUCUAAACCUUUGGU-AUAGG 58
                                 .........10........20........30........40........50.........
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                                 ........)))).......)))))))).
chr-12.trna251-Arg-TCT    -UUCAAGUCCCA-------CGCAAAUAU 76
chr-16.trna22-Arg-ACG     -UUCGAAUCCCU-------CCUCGCCCA 79
chr-1.trna36-Arg-CCT      -UUCAACCCUUA-------UCUGGCGCG 73
chr-1.trna35-Arg-CCT      -UUCAACCCCUA-------UCUGGCGCG 73
chr-8.trna79-Arg-CCT      -UUCAACCCCUA-------CCUGGCGCG 73
chr-9.trna253-Arg-CCT     -UUCAACCCCUA-------CCUGACGCG 73
chr-5.trna255-Arg-CCT     -UUCAACCCCUA-------CCUGACGCA 73
chr-16.trna78-Arg-CCT     -UUCAACCCCUA-------CCUGACGCA 73
chr-10.trna266-Arg-CCT    -UUCAACCCCUA-------CCUGAUGCA 73
chr-9.trna21-Arg-CCT      -UUCGACCCCUA-------CCUGACGCG 73
chr-9.trna22-Arg-CCT      -UUCGACCCCUA-------CCUGACGCG 73
chr-15.trna23-Arg-CCT     -UUCGACCCCUA-------CCUGGCGUG 73
chr-3.trna69-Arg-CCT      -UUCGACCCCUA-------CCUGACGCG 73
chr-15.trna22-Arg-CCT     -UUCGACCCCUA-------CCUGGCGCG 73
chr-3.trna104-Arg-CCT     -UUCGACCCCUA-------CCUGACGCG 73
chr-1.trna136-Arg-CCT     -UUCGACCCCUA-------CCUGACGCG 73
chr-15.trna70-Arg-CCT     -UUCGACCCCUA-------CCUGGCGCG 73
chr-3.trna106-Arg-CCT     -UUCGACCCCUA-------CCUGACGCG 73
chr-6.trna110-Arg-CCT     -UUCGACCCCUA-------CCUGGCGCG 73
chr-15.trna71-Arg-CCT     -UUCGACCCCUA-------CCUGGCGCG 73
chr-9.trna252-Arg-CCT     -UUCGACCCCUA-------CCUGACGCG 73
chr-9.trna258-Arg-CCT     -UUCGACCCCUA-------CCUGACGCG 73
chr-1.trna29-Arg-CCT      -UUCGACCCCUA-------CCUGGCGCG 73
chr-6.trna68-Arg-CCT      -UUCGACCCCUA-------CCUGGCGCG 73
chr-9.trna26-Arg-CCT      -UUCGAACCCUA-------CCUGACGCG 73
chr-7.trna89-Arg-CCT      -UUUGACCCCUA-------CCUGAUGCG 73
chr-13.trna364-Arg-CCT    -UUCAACCCCUA-------CCUGACGCA 73
chr-6.trna109-Arg-CCT     -UUCAACCCCUA-------CCUGGCGUG 73
chr-1.trna188-Arg-CCT     -UUUGACCCCUA-------CCUGACGCA 73
chr-1.trna276-Arg-CCT     -UUCGACCCCUA-------UCUGGCGUG 73
chr-13.trna365-Arg-CCT    -UUUAACCCCUA-------CCUGACGUG 73
chr-7.trna77-Arg-CCT      -UUCGACCCCUA-------CUUGGUGCG 73
chr-15.trna21-Arg-CCT     -UUUGACCCCUA-------CUUGAUGCG 73
chr-10.trna265-Arg-CCT    -UUCAACCCCUA-------CCUGACGCG 73
chr-1.trna186-Arg-CCT     -UUCAACCUCUA-------CCUGACACA 73
chr-6.trna101-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-4.trna119-Arg-TCT     -UUCGAGUCCCA-------CUAGGCGUG 73
chr-14.trna22-Arg-TCT     -UUUGAGUCCCA-------CUGGGUGUG 73
chr-6.trna47-Arg-TCT      -UUUGAGUCCCA-------CUGGGUGUG 73
chr-6.trna31-Arg-TCT      -UUUGAGUCCCA-------CUGGGCGUG 73
chr-2.trna58-Arg-TCT      -UUUGAGUCCCA-------CUGGGCGUG 73
chr-5.trna244-Arg-TCT     -UUUGAGUCCCA-------CUGGGCGUG 73
chr-4.trna107-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-14.trna40-Arg-TCT     -UUCGAGUCCCA-------CCGGGCGUG 73
chr-4.trna126-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-15.trna56-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-4.trna139-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-5.trna188-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-5.trna191-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-5.trna192-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-9.trna19-Arg-TCT      -UUCGAGUCCCA-------CUGGGCGUG 73
chr-10.trna138-Arg-TCT    -UUCGAGUCCCA-------CUGGGCGUG 73
chr-10.trna314-Arg-TCT    -UUCGAGUCCCA-------CUGGGCGUG 73
chr-10.trna315-Arg-TCT    -UUCGAGUCCCA-------CUGGGCGUG 73
chr-11.trna52-Arg-TCT     -UUCGAGUCCCA-------CUGGGCGUG 73
chr-12.trna196-Arg-TCT    -UUCGAGUCCCA-------CCAGGCGUG 73
chr-1.trna181-Arg-TCT     -UUCGAGUCCCA-------CCGGGCGUG 73
chr-14.trna66-Arg-TCT     -UUCGAGUCCCA-------UUGGGCGUG 73
chr-1.trna268-Arg-TCT     -UUCGAGUCUCA-------CUGGGCGUG 73
chr-5.trna230-Arg-TCT     -UUCAAGUCCCA-------CUGGGUGUG 73
chr-5.trna243-Arg-TCT     -UUCAAGUCCCA-------CUGGGCGUG 73
chr-9.trna20-Arg-TCT      -UUUGAAUCUCA-------CUGGGCGUG 73
chr-3.trna37-Arg-TCT      -UUCGAGUCCCA-------CUAGGCGUG 73
chr-9.trna113-Arg-TCT     -UUCGAGUCCCA-------CUUGGCGUG 73
chr-3.trna28-Arg-CCG      -UUCGAGUCCCA-------CCGUGAACG 73
chr-12.trna195-Arg-CCG    -UUCGAGUCCCA-------CCGUGAACG 73
chr-15.trna47-Arg-CCG     -UUCGAGUCCCA-------CCGUGAUCG 73
chr-12.trna194-Arg-CCG    -UUCGAGUCCCA-------CCGUGAACG 73
chr-6.trna23-Arg-CCG      -UUCGAGUCCCA-------CCGUGAUCG 73
chr-15.trna49-Arg-CCG     -UUCGAGUCCCA-------CCGUGAACG 73
chr-8.trna59-Arg-TCG      -UUCGAGUCCCA-------CCGUGAACA 73
chr-1.trna263-Arg-CCG     -UUCAAGUCCCA-------UCGUGAUCA 73
chr-6.trna22-Arg-TCT      -UUUGAGUCCCA-------CUGGGCGUG 73
chr-9.trna247-Arg-TCT     -UUCGAGUCCCA-------CUGGGUGUG 73
chr-3.trna36-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCA 74
chr-9.trna54-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCG 74
chr-5.trna22-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCG 74
chr-7.trna198-Arg-TCG     -UUCGACUCCCA-------CUGUGGUCG 74
chr-4.trna84-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCG 74
chr-15.trna59-Arg-TCG     -UUCGACUCCCA-------CUGUGGUCG 74
chr-9.trna57-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCG 74
chr-14.trna98-Arg-TCG     -UUCGACUCCCA-------CUGUGGUCG 74
chr-7.trna12-Arg-TCG      -UUCGACUCCCA-------CUGUGGUCA 74
chr-3.trna61-Arg-TCG      -UUGGACUCCCA-------CUGUGGUUG 74
chr-9.trna56-Arg-TCG      -UUCGACUCCCA----CUGCUGUGGUCG 77
chr-5.trna248-Arg-CCG     -UUCGAAUCCCA-------CUGCGAUCG 73
chr-2.trna52-Arg-CCT      -UUCGAUCCUCG-------CCGGGGGCU 72
chr-13.trna48-Arg-TCT     -UUCAAUACCCA-------CAGAUGGUG 72
chr-1.trna152-Arg-ACG     -UUCGAUCCCCA-------GCAGAGUCG 73
chr-1.trna182-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUUG 73
chr-15.trna14-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-10.trna88-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-10.trna93-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-14.trna90-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-14.trna63-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-3.trna115-Arg-ACG     -UUCGAUCCCCA-------GCAGAGUCG 73
chr-7.trna218-Arg-ACG     -UUCGAUCCCCA-------GCAGAGUCG 73
chr-12.trna64-Arg-ACG     -UUCGAUCCCCA-------GCAGAGUCG 73
chr-8.trna37-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-8.trna38-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-1.trna183-Arg-ACG     -UUCGAUCCCCA-------GUGGAGUCG 73
chr-8.trna32-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-7.trna217-Arg-ACG     -UUCGAUCCCCA-------GCAGAGUCG 73
chr-11.trna429-Arg-ACG    -UUCGAUCCCCA-------GUGGAGUCG 73
chr-8.trna30-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-8.trna51-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna33-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-8.trna39-Arg-ACG      -UUCGAUCCCUA-------GCAAAGUCG 73
chr-8.trna40-Arg-ACG      -UUCGAUCCCUA-------GCAAAGUCG 73
chr-8.trna53-Arg-ACG      -UUCGAUCCCCA-------GCAAAGUCG 73
chr-8.trna35-Arg-ACG      -UUCGAUCCCUA-------GCAAAGUCG 73
chr-8.trna36-Arg-ACG      -UUUGAUCCCUA-------GCAAAGUCG 73
chr-8.trna34-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna44-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna49-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna45-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna43-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-8.trna42-Arg-ACG      -UUUGAUCCCCA-------GCAAAGUCG 73
chr-1.trna31-Arg-ACG      -UUUGAUCUCCA-------GUGAAGUUG 73
chr-12
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