```
                                 (((.((((....((((.........)))).(((((.......)))))).............
chr-14.trna6-Asn-GTT     UCC-UCAGU--AGCUCAGCGG--UAGAGUGGCCGGCUGUUAACUGACUGGUC-------- 47
chr-13.trna25-Asn-GTT    UCC-UCAGU--AGCUCAACGG--UAGAGCGAUCGGUUGUUAACUAACUGGUC-------- 47
chr-5.trna3-Asn-GTT      UCU-UCAAU--AGCUCAACAG--UAGAGCGGUCGACUGUUAAUUGACUGCUC-------- 47
chr-18.trna39-Asn-GTT    UCC-UCAGU--AGCUCAGCGG--UAGAUCAGUCGGCUGUUAACUGACUAGUC-------- 47
chr-9.trna43-Asn-GTT     UCC-UCAGU--AGCUCAGUGG--UAGAGCGGUCGGCUGUUAACUGACUGGUC-------- 47
chr-15.trna4-Asn-GTT     UCC-UCAGU--AGCUCAGUGG--UAGAGCGGUCGGCUGUUAACUGACUGGUC-------- 47
chr-23.trna18-Asn-ATT    UCC-UCAAU--AGCUCAGCGG--UAGAGCGGUCGGCUAUUAACUGACUGGUC-------- 47
chr-15.trna27-Asn-GTT    UCC-UCAGU--AGCUCAGUGG--UAGAGCGGUCAACUGUUAACUGACUGGUC-------- 47
chr-20.trna57-Asn-GTT    UCC-UCAGU--AGCUCAGCGG--UAGAGCGGUCAGCUGUUAACUGAUUGGUC-------- 47
chr-22.trna27-Asn-GTT    UCU-UCAGU--AGCUCAGCGG--UAGAGCGGUCAGCUGUUAACUGAUUGGUC-------- 47
chr-20.trna68-Asn-GTT    UCC-UCGGU--AGCUCAGCGG--UAGAGCGGUCGGCUGUUAACUGACUGGUC-------- 47
chr-12.trna25-Asn-GTT    UCC-UCAGU--AGCUCAGCGG--UAGAGCGGUCGGCUGUUAACUGAUUGGUC-------- 47
chr-3.trna46-Asn-ATT     UCC-UCAGU--AGCUCAGCGG--UAGAGCGGUCGGCUAUUAACUGACUGGUC-------- 47
chr-21.trna30-Asn-GTT    UCC-UUAGU--AGCUCAGCGG--UAGAGCGGUCAGCUGUUAACUGAUUGGUC-------- 47
chr-2.trna44-Asn-GTT     UCC-UCAGU--AGCUCAGCGG--UAGAGCGGUCGGCUGUUAACUGACUGGUU-------- 47
chr-18.trna50-Asn-GTT    UCC-UUAGU--AGCUCAACAG--UAGAGUGGUCAUCUGUUAACUGACUGGUC-------- 47
chr-17.trna37-Asn-GTT    UCC-UCAGU--AGCUCAGCGG--UAGAGCGGUCGACUGUUAACUGACUGGUC-------- 47
chr-20.trna69-Asn-GTT    UCC-UCAGU--AGCUCAGCGA--UAGAGCAGUCGAUUGUUAACUGACUGGUC-------- 47
chr-22.trna43-Asn-GTT    UCC-UCAGU--AGCUCAGCGG--UAAAGCAGUCGGCUGUUAACUGACUGGUC-------- 47
chr-10.trna28-Asn-GTT    UCC-UCAGU--AGCUCAGCAG--UAGAGCGGUCGGCUGUUAACUGACUGGUC-------- 47
chr-8.trna44-Asn-GTT     UUC-GCGGU--AGCUCAGCGG--UAGAGCGGUCGGCUGUUAAUUGACUGGUC-------- 47
chr-12.trna42-Asn-GTT    UUC-GCGGU--AGCUCAGCGG--UAGAGCGGUCGGCUGUUAAUUGACUGGUC-------- 47
chr-24.trna31-Asn-GTT    UCC-UCAGU--AGCUCAGUGG--UAGAGCGGUCGACUGUUAACUGACUGGUC-------- 47
chr-22.trna57-Asn-GTT    UCU-UCAGU--AGCUCAGUAG--UAGAGCGGUCGACUGUUAACUGACUGGUC-------- 47
chr-16.trna2-Asn-GTT     UCC-UCAGU--AGCUCAGCGG--UAGAGCAGUCGACUGUUAAUUGGCUAGUU-------- 47
chr-1.trna33-Asn-ATT     UCU-UCAGU--AGCUCAGUGG--UAGAUCAAUCGACUAUUAACUGAUUGAUC-------- 47
chr-4.trna26-Asn-GTT     UCC-UUAAU--AGAUUAGCGG--UAGAGCCGUCUACUGUUAACUGACUGGUC-------- 47
chr-22.trna48-Asn-GTT    UCC-UCAAU--AGCUCAGCUA--UAGAGCGGCCAGCUGUUAACUGACUGGUC-------- 47
chr-25.trna1-Asn-GTT     UCC-UCAGU--CUCUCAGCGG--UAGAGCGGUCGGCUGUUGACUAAUUCGUC-------- 47
chr-19.trna27-Asn-ATT    GCU-AGAAU--AGCACAGUUAGUUAGAGCAUGUGGCUAUUAACCACAAGGUU-------- 49
chr-1.trna52-Asn-ATT     UCU-AGAAU--AGUUCAGUUGGUUAGAGCGUGUGGCUAUUAACCACAAGGUC-------- 49
chr-1.trna53-Asn-ATT     UCU-AGAAU--AGUUCAGUUGGUUAGAGCGUGUGGCUAUUAACCACAAGGUC-------- 49
chr-9.trna26-Asn-ATT     UCU-AGAAU--AGUUCAGUUGGUUAGAGCGUGUGGCUAUUAACCACAAGGUC-------- 49
chr-19.trna26-Asn-GTT    GCU-AGAAU--AGCUUAGUUGGUUAGAGUGUGGCUGUUAACCACAAGUUU-------- 49
chr-4.trna27-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUAUGGCUGUUAACCAUAAGGUC-------- 49
chr-4.trna28-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUAUGGCUGUUAACCAUAAGGUC-------- 49
chr-7.trna4-Asn-GTT      GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-7.trna5-Asn-GTT      GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-14.trna80-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna4-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna60-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna61-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna62-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna64-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-22.trna56-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-17.trna58-Asn-GTT    GCU-GGAGU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-9.trna25-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-10.trna56-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-22.trna55-Asn-GTT    GCU-GGAAU--AGCUCUGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-16.trna63-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUAGCUGUUAACCAUAAGGUC-------- 49
chr-7.trna3-Asn-GTT      GCU-GGAAU--AGCUCAGUUGGCUAGAGCAUGUGGCUGUUAACCACAAGGUC-------- 49
chr-7.trna2-Asn-GTT      GCU-GGAAU--AGCUCAGUUGGCUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-10.trna92-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGCUAGAGCGUGUGGCUGUUAACCACAAGUUC-------- 49
chr-9.trna24-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGCUAGAGCGUGUGGCUGUUAACCACAAGGUU-------- 49
chr-20.trna16-Asn-GTT    GCU-GGAGU--AGCUCAGUCGGUUAGAGCGUAUGGCUGUUAACCAUAAGGUC-------- 49
chr-19.trna17-Asn-GTT    GCU-GGAGU--AGCUCAGUCGGUUAGAGCGUAUGGCUGUUAACCAUAAGGUC-------- 49
chr-24.trna53-Asn-GTT    GCU-GGAAU--AGCUUAGUUGUUUAGAGCGUGUGGCUGUUAACCACAAGGUC-------- 49
chr-15.trna10-Asn-GTT    GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGUU-------- 49
chr-5.trna75-Asn-GTT     GCU-GGAGU--AGCUCAGUCGAUUAGAGCGUAUGGCUGUUAACCAUAAGGUC-------- 49
chr-2.trna62-Asn-GTT     GCU-GGAAU--AGUUCAAUUGGUUAGAGCGUAUGGCUGUUAACCAUAAGGUU-------- 49
chr-19.trna28-Asn-ATT    GCU-AGAAU--AUCUUAGUUUCUUAGAGCAUGUGGCUAUUAACCACAACAUU-------- 49
chr-10.trna40-Asn-ATT    GGA-UCCAUAAGCUCAAAACCGGCAGAGCGCUCAAACAUUGUUUGGGAGGCU-------- 51
chr-21.trna62-Asn-ATT    UUGAGUUUACUAGCUUAGUUGGUUGUAGCUUCAUGCUAUUAACAUGAAGGUU-------- 52
chr-16.trna6-Asn-GTT     GCU-GGAAU--AGCUCAGUUGGUUAGAGCGUGUGGCUGUUAACCACAAGGU--------- 48
chr-24.trna5-Asn-GTT     GGA-GAGAU--GGCUGAGUGGACUAAAGCGUCGGAUUGUUAAUCCAUUGUGCGAGUUAUU 57
                                 .........10.........20.........30.........40.........50.........
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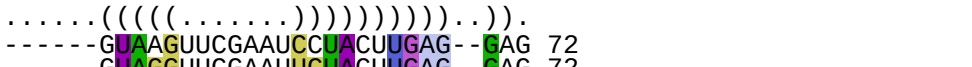

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                                 ......(((((.......)))))))))).)).
chr-14.trna6-Asn-GTT     ------GUAAGUUCGAAUCCUACUUGAG--GAG 72
chr-13.trna25-Asn-GTT    ------GUAGGUUCGAAUUCUACUUGAG--GAG 72
chr-5.trna3-Asn-GTT      ------GUAGGUUCAAAUCCUACCUGAG--GAG 72
chr-18.trna39-Asn-GTT    ------GUAGGUUCAAAUCCUACUUGAG--GAG 72
chr-9.trna43-Asn-GTT     ------GUAGGUUCAAAUCCUACUUGGG--GAG 72
chr-15.trna4-Asn-GTT     ------GUAGGUUCAAAUCCUACUUGGG--GAG 72
chr-23.trna18-Asn-ATT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-15.trna27-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-20.trna57-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-22.trna27-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-20.trna68-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-12.trna25-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-3.trna46-Asn-ATT     ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-21.trna30-Asn-GTT    ------AUAGGUUCGAAUCCUACCUAAG--GAG 72
chr-2.trna44-Asn-GTT     ------GUAGGUUCGAAUCCUACUUGAG--GAU 72
chr-18.trna50-Asn-GTT    ------GUAGGUUCGAAUCUUACUUGAG--GAG 72
chr-17.trna37-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-20.trna69-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-22.trna43-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-10.trna28-Asn-GTT    ------AUAGGUUCAAAUCCUACUUGAG--GAG 72
chr-8.trna44-Asn-GTT     ------GUAGGUUCGAAUCCUACUUGAG--AAG 72
chr-12.trna42-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--AAG 72
chr-24.trna31-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-22.trna57-Asn-GTT    ------GUAGGUUCAAAUCCUACUUGAG--GAG 72
chr-16.trna2-Asn-GTT     ------GUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-1.trna33-Asn-ATT     ------AUAGGUUCGAAUCCUACUUGAG--GAG 72
chr-4.trna26-Asn-GTT     ------GUAGGUUCGAAUCCUAUUUGAG--GAG 72
chr-22.trna48-Asn-GTT    ------GUAGGUUCGAAUCCUACUUGAGUAGAU 74
chr-25.trna1-Asn-GTT     ------GUAGGUUCAAAUCCUACUUGAA--GAG 72
chr-19.trna27-Asn-ATT    ------GGAGGUUCAAACCCUCCUUCUA--GCG 74
chr-1.trna52-Asn-ATT     ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-1.trna53-Asn-ATT     ------GGAGGUUCAAGCCCUCCUUCUA--GUG 74
chr-9.trna26-Asn-ATT     ------GGAGGUUCAAGCCCUCCUUCUA--GUG 74
chr-19.trna26-Asn-GTT    ------GAAGGUUCAAACCCUUCUUCUA--GUG 74
chr-4.trna27-Asn-GTT     ------GGAGGUUCGAGCCCUCCUUCUA--GCG 74
chr-4.trna28-Asn-GTT     ------GGAGGUUCGAGCCCUCCUUCUA--GCG 74
chr-7.trna4-Asn-GTT      ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-7.trna5-Asn-GTT      ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-14.trna80-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna4-Asn-GTT     ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna60-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna61-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna62-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna64-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-22.trna56-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-17.trna58-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-9.trna25-Asn-GTT     ------GGAGGUUCAAACCCUCCUUCUA--GCG 74
chr-10.trna56-Asn-GTT    ------GGAGGUUCAAACCCUCCUUCUA--GCG 74
chr-22.trna55-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-16.trna63-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-7.trna3-Asn-GTT      ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-7.trna2-Asn-GTT      ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-10.trna92-Asn-GTT    ------GGAGGUUCAAGCCCUCCUUCUA--GCG 74
chr-9.trna24-Asn-GTT     ------GGAGGUUUAAGCCCUCCUUCUA--GCA 74
chr-20.trna16-Asn-GTT    ------GGAGGUUCGACCCCUCCCUCUA--GCG 74
chr-19.trna17-Asn-GTT    ------AGAGGUUCAACCCCUCUCUCUA--GCG 74
chr-24.trna53-Asn-GTT    ------AGAGGUUCAAGCCCUCUUUCUA--GCG 74
chr-15.trna10-Asn-GTT    ------AGAGGUUCAAGCCCUCU-UUCA--GCG 73
chr-5.trna75-Asn-GTT     ------GGAGGUGCGACCCCUCCCUGUA--GCG 74
chr-2.trna62-Asn-GTT     ------GGAGGCUUGAGCCCUUUUUCUA--GAG 74
chr-19.trna28-Asn-ATT    ------GGAGGUUGAAACCCUCUUUCUA--GCA 74
chr-10.trna40-Asn-ATT    ------GGUGGUUCGAAUCCACCUGGAU--CCU 76
chr-21.trna62-Asn-ATT    ------GUAGGUUCAACUCUUGUAGGCC--AAA 77
chr-16.trna6-Asn-GTT     -------CGGCCCCUAA-CCCGUACCU---GCC 70
chr-24.trna5-Asn-GTT     UGUACAGAGGGUUCGAAUCCCUCUCUUU--CCG 88
                                 .........70.........80.........90..
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