```
                        (((((((..((((........)))).(((((.......)))))).....(((((.
chr-1.trna1-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGCACGGGGA 54
chr-6.trna47-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGCACGGGGA 54
chr-1.trna5-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-1.trna150-Ala-AGC   GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-2.trna95-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-10.trna1-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-3.trna79-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-4.trna63-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-8.trna177-Ala-AGC   GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-5.trna14-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-8.trna86-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-7.trna82-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-10.trna68-Ala-AGC   GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-10.trna23-Ala-AGC   GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-2.trna48-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAG------AAGUACGGGGC 54
chr-11.trna166-Ala-AGC  GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCCUGCGAG------AGGUACGGGGA 54
chr-1.trna152-Ala-TGC   GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-1.trna192-Ala-TGC   GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-6.trna43-Ala-TGC    GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-12.trna43-Ala-TGC   GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-5.trna4-Ala-TGC     GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-4.trna50-Ala-TGC    GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-4.trna67-Ala-TGC    GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-4.trna51-Ala-TGC    GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-9.trna36-Ala-TGC    GGGGAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGCGAG------AGGUACAGGGU 54
chr-1.trna191-Ala-TGC   GGGGAUGUAGCUCAAAUGGUAGAGCCCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-1.trna193-Ala-CGC   GGGGGUGUAGCUCAUAUGGUAGAGCGGCUCGCUUCGCAUGCGAG------AGGCACGGGGU 54
chr-3.trna64-Ala-CGC    GGGGGUGUAGCUCAUAUGGUAGAGCGGCUCGCUUCGCAUGCGAG------AGGCACGGGGU 54
chr-3.trna90-Ala-CGC    GGGGGUGUAGCUCAUAUGGUAGAGCGGCUCGCUUCGCAUGCGAG------AGGCACGGGGU 54
chr-8.trna89-Ala-CGC    GGGGGUGUAGCUCAUAUGGUAGAGCGGCUCGCUUCGCAUGCGAG------AGGCACGGGGU 54
chr-9.trna15-Ala-AGC    GGGGAUGUAGCUCAGAUGGUAGAGCGGCUCGCUUAGCAUGCGAGAGG---AGGUACGGGGA 57
chr-4.trna68-Ala-TGC    AGGGAUGUAGCUCAAAUGGUAGAGAGCUCGCUUUGCAUGCGAG------AGGCACGGGGU 54
chr-12.trna68-Ala-CGC   GGGCA--UAGCUCAUAUGGUAGAGCACUCGCUUCGCAUGCGAG------AGGUACGGGGU 52
chr-7.trna7-Ala-AGC     GGGGAUGUAGCUCAGUUGGUAGAGCGGCUUAGCAUGCGAG------AGGUACGGGGA 54
chr-2.trna47-Ala-TGC    GGGAAUGUAGCUCAAAUGGUAGAGCGGCUCGCUUUGCAUGUGAGAGGCACGGGGUUGGGGU 60
                        .........10........20........30........40........50.........

                        ......)))))))))))).
chr-1.trna1-Ala-AGC     UCGAUACCCCGCAUCUCCA 73
chr-6.trna47-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-1.trna5-Ala-AGC     UCGAUACCCCGCAUCUCCA 73
chr-1.trna150-Ala-AGC   UCGAUACCCCGCAUCUCCA 73
chr-2.trna95-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-10.trna1-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-3.trna79-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-4.trna63-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-8.trna177-Ala-AGC   UCGAUACCCCGCAUCUCCA 73
chr-5.trna14-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-8.trna86-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-7.trna82-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-10.trna68-Ala-AGC   UCGAUACCCCGCAUCUCCA 73
chr-10.trna23-Ala-AGC   UCGAUACCCUGCAUCUCCA 73
chr-2.trna48-Ala-AGC    UCGAUACCCCGCAUCUCCA 73
chr-11.trna166-Ala-AGC  GCGAUAUCCCGCAUCUCCA 73
chr-1.trna152-Ala-TGC   UCGAUCCCCCGCAUCUCCA 73
chr-1.trna192-Ala-TGC   UCGAUCCCCCGCAUCUCCA 73
chr-6.trna43-Ala-TGC    UCGAUCCCCCGCAUCUCCA 73
chr-12.trna43-Ala-TGC   UCGAUCCCCCGCAUCUCCA 73
chr-5.trna4-Ala-TGC     UCGAUCCCCCGCAUCUCCA 73
chr-4.trna50-Ala-TGC    UCGAUCCCCCGCAUCUCCA 73
chr-4.trna67-Ala-TGC    UCGAUCCCCCGCAUCUCCA 73
chr-4.trna51-Ala-TGC    UCGAUCCCCCGCAUCUCCA 73
chr-9.trna36-Ala-TGC    UCGAUCCCCUGCAUCUCCA 73
chr-1.trna191-Ala-TGC   UCGAUCCCCCGCAUCUCCA 73
chr-1.trna193-Ala-CGC   UCGAUUCCCCGCACCUCCA 73
chr-3.trna64-Ala-CGC    UCGAUUCCCCGCACCUCCA 73
chr-3.trna90-Ala-CGC    UCGAUUCCCCGCACCUCCA 73
chr-8.trna89-Ala-CGC    UCGAUUCCCCGCACCUCCA 73
chr-9.trna15-Ala-AGC    UCGAUACCCCGCAUCUCCA 76
chr-4.trna68-Ala-TGC    UCGAUCCUCCGUAUCUCCA 73
chr-12.trna68-Ala-CGC   UCGAUUCCCCCACACCUCCA 71
chr-7.trna7-Ala-AGC     UUGA----CUGCAUCUCCA 69
chr-2.trna47-Ala-TGC    UCGAUCCCCCGCAUCUCCA 79
                        .........70........
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