```
                        ((((((.............(.............((........))))))))...)
chr-8e.trna3-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUUCCGCCUGUCACG 39
chr-8c.trna3-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUUCCGCCUGUCACG 39
chr-8c.trna5-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUAAGUAUUUCCGCCUGUCACG 39
chr-8c.trna4-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUAAGUAUUUCCGCCUGUCACG 39
chr-8e.trna4-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUAAGUAUUUCCGCCUGUCACG 39
chr-11c.trna10-Asp-GTC  GUCGUU--------------GUAG------UAUAGUGGUGAGUAUCCCGCCUGUCACG 39
chr-7e.trna58-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUCCCGCCUGUCACG 39
chr-7c.trna60-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUAAGUAUCCCGCCUGUCACG 39
chr-7e.trna23-Asp-GTC   CUCGUU--------------GUAG------UAUAGUGGUGAGUAUUUCCGCCUGUCACG 39
chr-1c.trna66-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-1c.trna59-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-1e.trna47-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-2c.trna13-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-10c.trna31-Asp-GTC  GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-10e.trna38-Asp-GTC  GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-2c.trna14-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-2e.trna15-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-7c.trna7-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-8e.trna26-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-7c.trna61-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-7c.trna62-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-7e.trna59-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-3c.trna25-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACA 39
chr-7e.trna60-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGUCUGUCACG 39
chr-1c.trna38-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUACCCGCCUGUCACG 39
chr-4c.trna2-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUGAGUAUACCCGCCUGUCACG 39
chr-4e.trna2-Asp-GTC    GUCGUU--------------GUAG------UAUAGUGGUGAGUAUACCCGCCUGUCACG 39
chr-6c.trna16-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-1c.trna68-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGUCUGUCACG 39
chr-2e.trna14-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCUGCCUGUCACC 39
chr-1c.trna61-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCACGCCUGUCACG 39
chr-3e.trna10-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUAAGUAUUUUUGUCUGUCAUG 39
chr-6e.trna17-Asp-GTC   GUCGUU--------------GUAG------CAUAGUGGUGAGUAUUCUUGCCUGUCAUG 39
chr-1c.trna65-Asp-GTC   GUCGUU--------------GU--------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 37
chr-1c.trna60-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCC--CCUGUCACG 37
chr-1c.trna58-Asp-GTC   GUCGUU--------------GUAG------UACAGUGGUAAGUAUUCCCGCCUGUCACG 39
chr-5c.trna1-Asp-GTC    UCUAUC--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-6c.trna15-Asp-GTC   GUCAUU--------------GUAG------UAUACUGGUGAGUAUUCCUGCCUGUCACG 39
chr-3e.trna9-Asp-GTC    GUUGUU--------------GUAG------UAUAGUGGUAAGUAUUUUACCUGUCAUG 39
chr-1c.trna64-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 39
chr-1c.trna67-Asp-GTC   GUCGUU--------------GUAG------UAUAGUGGUGAGUAUUCUCGCCUGUCACG 39
chr-1c.trna63-Asp-GTC   GUCGUU--------------GUAG------UAUAGGUGUGAGUAUUCCCGCCUGUCACG 39
chr-4c.trna5-Asp-GTC    CCCGUUAC------GUAAAUUGUAG------UAUAGUGGUGAGUAUUCCCGCCUGUCACG 48
chr-5e.trna8-Asp-GTC    GUCAUU--------------GUAA------UAUAGUGGUGAGUAACCUCGCCUGUCAUG 39
chr-5e.trna9-Asp-GTC    GUCAUU--------------GUAG------UAUAGUGGUGAGUAUCCUGCCUGUCAUG 39
chr-2e.trna16-Asp-GTC   GUCGUUGUAGUAUAGUGGUGAGUAUUCCCGCUAUAGUGGUGAGUAUUCCCGCCUGUCACC 60
                        .........10........20........30........40........50.........
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                        ))))))..(((((.......)))))))))))).
chr-8e.trna3-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-8c.trna3-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-8c.trna5-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-8c.trna4-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-8e.trna4-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-11c.trna10-Asp-GTC  CGGGAGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7e.trna58-Asp-GTC   CGGGAGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7c.trna60-Asp-GTC   CGGGAGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7e.trna23-Asp-GTC   CGGACGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-1c.trna66-Asp-GTC   CGAGUGACUCAGGUUCGAUCCCGGGCAACGGCG 72
chr-1c.trna59-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-1e.trna47-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-2c.trna13-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-10c.trna31-Asp-GTC  CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-10e.trna38-Asp-GTC  CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-2c.trna14-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-2e.trna15-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7c.trna7-Asp-GTC    CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-8e.trna26-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7c.trna61-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7c.trna62-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-7e.trna59-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-3c.trna25-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAGCGGCG 72
chr-7e.trna60-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-1c.trna38-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-4c.trna2-Asp-GTC    CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-4e.trna2-Asp-GTC    CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-6c.trna16-Asp-GTC   CGGGCGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-1c.trna68-Asp-GTC   UGGGUAACCCAGGUUCGAUCCCUGGCAACGGCG 72
chr-2e.trna14-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 72
chr-1c.trna61-Asp-GTC   CGGGUGACCUGGGUUAUAUCCCCGGGCAACGGCG 72
chr-3e.trna10-Asp-GTC   CGGACGACCCGGGUUCGAUCCCCGGUAAUGGCG 72
chr-6e.trna17-Asp-GTC   CAGGCGACCCGGGUUUGAUCCCGGGCAACGGCG 72
chr-1c.trna65-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 70
chr-1c.trna60-Asp-GTC   CGGGUGACCCGGGUUCGAUCCCGGGCAACGGCG 70
chr-1c.trna58-Asp-GTC   CGAGUGACCCGAGUUCGAUCCCCGGGCAACUGCG 72
chr-5c.trna1-Asp-GTC    CGGGUGACCCGGGUUCGAUCCCCGGCAACGGCG 72
chr-6c.trna15-Asp-GTC   CGGGCGACCCGGGUUCGAUCCCCAGCAACGGUG 72
chr-3e.trna9-Asp-GTC    CGGACGACCCGGGUUCGAUCCCGGUAAUGGCG 72
chr-1c.trna64-Asp-GTC   CGGG-UGACCGGGUACGAU-CCCGGCAACGGCG 70
chr-1c.trna67-Asp-GTC   CGGU-GACCCGGGUUCGAA-CCCGGCAACGGCG 70
chr-1c.trna63-Asp-GTC   CGG-UGACCCGGGUUCGAUCCCCGGCAACAGCG 71
chr-4c.trna5-Asp-GTC    CGGGUGACCCGGGUUCGAUCCCCGGCAACGGCG 81
chr-5e.trna8-Asp-GTC    CGGGAGACCUGGGUUCGAUCUUUGGCAACGGUG 72
chr-5e.trna9-Asp-GTC    CGAGAGACC-AGGUUCGAUCUUUGGCAACGGCA 71
chr-2e.trna16-Asp-GTC   CGGGUG-CCCGGGUUCGAUCCCCGGCAACGGCG 92
                        .........70........80........90..
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