```
                                 (((((((..((((........))))((((((........))))))....(((((.......
chr-1.trna6-Arg-TCT              GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUGGAG 59
chr-1.trna25-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-UAUCAAGCGAUUGUGGGUUCGAG 59
chr-8.trna172-Arg-TCT            GCGCUCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGUGAUUGUGGGUUCGAG 59
chr-1.trna14-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-1.trna109-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-15.trna143-Arg-TCT           GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-1.trna110-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-2.trna2-Arg-TCT              GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-2.trna183-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna126-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna137-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna176-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna205-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-6.trna64-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-6.trna65-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-9.trna176-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-9.trna178-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-10.trna121-Arg-TCT           GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna51-Arg-TCT            GCACCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-12.trna104-Arg-TCT           GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna79-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna83-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna84-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna85-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna99-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna230-Arg-TCT            GCGUUCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-11.trna188-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-7.trna119-Arg-TCT            GCGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-12.trna66-Arg-TCT            GCGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-5.trna126-Arg-TCT            GCGCCUGUGGCCUAAUGGAUAAGGCGGUUUGACUUCU-AAUCAAACGAUUGUGGGUUCGAG 59
chr-14.trna137-Arg-TCT           GCGCCCGUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-5.trna286-Arg-TCT            GCGCCCGUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-5.trna268-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-8.trna165-Arg-TCT            GCGCUCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-4.trna187-Arg-TCT            GUGCCCAUGGCCUAAUGGAUAAGGCGGUUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-7.trna31-Arg-TCT             GUGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-13.trna106-Arg-TCT           GCGCCCAUGGCUUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-12.trna135-Arg-TCT           GUGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUUGAG 59
chr-4.trna60-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUUGAG 59
chr-11.trna207-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUUGAG 59
chr-5.trna128-Arg-TCT            GCGCCUGUGGCCUAAUGGAUAAGGCGGUUUGACUUCU-AAUCAAACGAUUGUGGGUUCGAG 59
chr-7.trna30-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-9.trna145-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGUUUGACUUCU-AAUCAAGCGAUUGUGGGUUCAAG 59
chr-12.trna136-Arg-TCT           GUGCCUAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCAAG 59
chr-5.trna127-Arg-TCT            GUGCCUGUGGCCUAAUGGAUAAGGCGGUUUGACUUCU-AAUCAAACGAUUGUGGGUUCAAG 59
chr-11.trna206-Arg-TCT           GCACCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-9.trna177-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAACAAGCGAUUGUGGGUUCGAG 59
chr-4.trna125-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGUGAUUGUGGGUUCGAG 59
chr-4.trna136-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUUGAG 59
chr-7.trna134-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGAUUCGAG 59
chr-7.trna29-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGAUUCGAG 59
chr-1.trna43-Arg-TCT             GCGCCCAUGGCCUAAUGGAUAAAGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGUG 59
chr-14.trna44-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGCUUGUGGGUUCGAG 59
chr-6.trna245-Arg-TCT            GCGCCCAUGGCAUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-12.trna178-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCAUUUGACUUCU-AAUCAAGGAUUGUGGGUUCGAG 59
chr-12.trna176-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCACUUGACUUCU-AAUCAAGGAUUGUGGGUUUGAG 59
chr-12.trna180-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCACUUGACUUCU-AAUCAAGGGAUUGUGGGUUCGAG 59
chr-12.trna175-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAGGCACUUGACUUCU-AAUCAAGGAUUGUGGGUUCGAG 59
chr-10.trna120-Arg-TCT           GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-5.trna269-Arg-TCT            GCGCGCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAUGCGAUUGUGGGUUCGAG 59
chr-14.trna188-Arg-TCT           GCGCCCGUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAUGCGAUUGUGGGUUCGAG 59
chr-9.trna146-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUAACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-2.trna201-Arg-TCT            GCGCCCAUGGCCUAAUGGAUAAGGCGGCUUGACUUCU-AAUCAAGUGAUUGUGGGUUCGAG 59
chr-1.trna27-Arg-TCT             GCGCCAAUGGCCUAAUGGAUAAGGCGGCUUUACUUCU-AAUCAAGCGAUUGUGGGUUCGAG 59
chr-12.trna179-Arg-TCT           GCGCCUAUGGCCUAAUGGAUAAAUCACUUGACUUCU-AAUCAAGGGAUUGUGGGUUUAAG 59
chr-12.trna177-Arg-TCT           GUGCCUAUGGCCUAAUGGAUAAGGUACUUGACUUCUAAAUCAAGGGAUUGUGGGUUCGAG 60
chr-15.trna50-Arg-TCT            GUGCCCAUAGCCUAAUGGAUAAGGCACUUGACUUCU-AAUCAAGGGAUUGUGGGUUCGUG 59
chr-2.trna84-Arg-TCT             GCGUUUGUAGUCCAACGGUUAGGAUAUUUGCCUUCU-AAGCAAUAGA-CCCGGGUUCGAC 58
chr-6.trna235-Arg-TCT            GCGUUUGUAGUCCAACUGUUAGGAUAAUUGCCUUCU-AAGCAAUAGA-CCCGGGUUCGAC 58
chr-2.trna94-Arg-TCT             GCGUCUGUAGCUCAGUGGUAGAGCGUCUGUUUUCU-AAGCAGAAAGUCGUAGGUUCGAC 59
chr-3.trna184-Arg-TCT            GCGCCUGUAGCUCAGUGGUAGAGCGUUUGUUUUCU-AAGCAAAAAGUCAUAGGUUCGAC 59
chr-2.trna89-Arg-TCT             GCGUCUGUGGCUUAGUGGAUAGAGCGUCUGUUUUCU-AAGCAGAAAGUUGUAGGUUCGAC 59
chr-9.trna150-Arg-TCT            GCGUCCAUUGCCUAAUGGAUAGGGUAGAGGUCUUCU-AAACAUUUGG-UAUAGGUUCAAA 58
chr-9.trna12-Arg-TCT             GCGUCCAUUGCUUAAUGGAUAGGGUAGAGGUCUUCU-AAACCUUUGG-UAUAGGUUCAAA 58
chr-11.trna52-Arg-TCT            AGAACUAUGGCCUAAUGGAUAAGGCGCUUGACUUCU-AAUCAAGCGA---UGGGUUCAAG 56
                                 .........10........20........30........40........50.........
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                                 .)))))))).......)))).
chr-1.trna6-Arg-TCT              UCCCACUGG-------GCGUG 73
chr-1.trna25-Arg-TCT             UCUCACUGG-------GCGUG 73
chr-8.trna172-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-1.trna14-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-1.trna109-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-15.trna143-Arg-TCT           UCCCACUGG-------GUGUG 73
chr-1.trna110-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-2.trna2-Arg-TCT              UCCCACUGG-------GCGUG 73
chr-2.trna183-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna126-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna137-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna176-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna205-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-6.trna64-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-6.trna65-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-9.trna176-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-9.trna178-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-10.trna121-Arg-TCT           UCCCACUGG-------GCGUG 73
chr-11.trna51-Arg-TCT            UCCCACUGG-------GUGUG 73
chr-12.trna104-Arg-TCT           UCCCACUGG-------GCGUG 73
chr-11.trna79-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-11.trna83-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-11.trna84-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-11.trna85-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-11.trna99-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna230-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-11.trna188-Arg-TCT           UCCCACUGG-------GCGUG 73
chr-7.trna119-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-12.trna66-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-5.trna126-Arg-TCT            UCCCACCAG-------GCGUG 73
chr-14.trna137-Arg-TCT           UCCCACCGG-------GCGUG 73
chr-5.trna286-Arg-TCT            UCCCACCGG-------GCGUG 73
chr-5.trna268-Arg-TCT            UUCCACUGG-------GUGUG 73
chr-8.trna165-Arg-TCT            UCCCAUUGG-------GCGUG 73
chr-4.trna187-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-7.trna31-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-13.trna106-Arg-TCT           UCCCACUGG-------GCGUG 73
chr-12.trna135-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-4.trna60-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-11.trna207-Arg-TCT           UCCCACUGG-------GUGUG 73
chr-5.trna128-Arg-TCT            UCCCACCAG-------GCGUC 73
chr-7.trna30-Arg-TCT             UCCCACUGG-------GCGUA 73
chr-9.trna145-Arg-TCT            UCCCACUGG-------GUGUG 73
chr-12.trna136-Arg-TCT           UCCCACUAG-------GUAUG 73
chr-5.trna127-Arg-TCT            UCCCACCAG-------GCGUG 73
chr-11.trna206-Arg-TCT           UCCCACUGG-------GCGUG 73
chr-9.trna177-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-4.trna125-Arg-TCT            UCCCACUAG-------GCGUG 73
chr-4.trna136-Arg-TCT            UCCCACUAG-------GCGUG 73
chr-7.trna134-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-7.trna29-Arg-TCT             UCUCACUGG-------GCGUG 73
chr-1.trna43-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-14.trna44-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-6.trna245-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-12.trna178-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-12.trna176-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-12.trna180-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-12.trna175-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-10.trna120-Arg-TCT           UCCCACUGG------CGUGCU 74
chr-5.trna269-Arg-TCT            UCCCACUGG-------GCGUG 73
chr-14.trna188-Arg-TCT           UCCCACCGG-------GCGUG 73
chr-9.trna146-Arg-TCT            CCCCACUGG-------GCGUG 73
chr-2.trna201-Arg-TCT            UCACACUGG-------GCGUG 73
chr-1.trna27-Arg-TCT             UCCCACUGG-------GCGUG 73
chr-12.trna179-Arg-TCT           UCCCACUAG-------GCGUG 73
chr-12.trna177-Arg-TCT           GCCCACUAG-------GCGUG 74
chr-15.trna50-Arg-TCT            UC-CACUGA-------GCGUG 72
chr-2.trna84-Arg-TCT             UCCCGGCAA-------ACGCA 72
chr-6.trna235-Arg-TCT            UCCCGGCAA-------ACGCA 72
chr-2.trna94-Arg-TCT             CCCUACCUG-------ACGCG 73
chr-3.trna184-Arg-TCT            CCCUAUCUG-------GCGCG 73
chr-2.trna89-Arg-TCT             CCCUACCUA-------ACGCG 73
chr-9.trna150-Arg-TCT            UUCUAUUGG-------ACACA 72
chr-9.trna12-Arg-TCT             UUCUAUUGG-------ACACA 72
chr-11.trna52-Arg-TCT            UCCCACUAGGUGUGAAUUUUA 77
                                 .........70........80
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