```
                                 (((((((.....((((((.((.(((..((.....))).)).)))))))).....(((
chr-1.trna356-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCU 52
chr-3.trna338-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-5.trna461-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCCCACACACUAAAGGUCCCC 52
chr-4.trna279-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-6.trna756-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-7.trna175-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-7.trna176-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-12.trna257-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-7.trna321-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-7.trna407-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-7.trna409-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-11.trna186-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna475-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna447-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna446-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna445-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna444-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-9.trna444-Val-CAC    GUCUGGU------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna422-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna410-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna401-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna388-Val-CAC   GUCUGGU------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-1.trna210-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-2.trna12-Val-CAC     GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-2.trna412-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-2.trna445-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-5.trna328-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-6.trna322-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-6.trna331-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-11.trna317-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-11.trna318-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-12.trna403-Val-CAC   GUCUAGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-2.trna420-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCAUGUUAGUCUCACACACUAAAGGUCCCC 52
chr-9.trna530-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-1.trna209-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-12.trna402-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCUC 52
chr-4.trna330-Val-CAC    GUCUGGA------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-11.trna304-Val-CAC   GUCUGGA------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-3.trna268-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACAAAAGGUCCCC 52
chr-6.trna440-Val-CAC    GUCUGGA------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACAUUAAAGGUCCCC 52
chr-8.trna59-Val-CAC     GUCUGGG------UGGCGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-10.trna432-Val-CAC   GUCUUGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-12.trna386-Val-CAC   GUCUGGG------UGGUGUAGUUGGU--UAUCACGUUAGUCUCACACACUAAAGGUCCCC 52
chr-5.trna176-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGCUAGUCUCACACACUAGUGGUCCCC 52
chr-6.trna366-Val-CAC    GUCUGGG------UGGUGUAGUUGGU--UAUCACGCUAGUCUCACACACUAGUGCUCCCC 52
chr-5.trna560-Val-CAC    GGGGCGG------UGGCGCAGUUGGC--UAGCGCGUAGGUCUCACAAUCCUGAGGUCGAG 52
chr-10.trna25-Val-CAC    GGUGUCG------UGGUGUAGUUCGUC-UAGCACGUCAGUUUCACACGCUGAAGAUCUCC 53
chr-6.trna700-Val-CAC    GGUUUUG------UGGUGUAGUUGGU--UAUCAC----GUCUAACACACUGAAGGUCUCC 48
chr-2.trna11-Val-CAC     GCUUGGG------UGGUGUAGGUCGU--UAUCAUGUUAGUCUCACACAUUAAAGAUCCCU 52
chr-7.trna408-Val-CAC    GUUUGGGGCGCCCGGCUGUAGAUGCUCUUAUCACGUUAGUCUCACACACUAAAGGUCCCC 60
                         .........10........20........30........40........50........
                         ((.......)))))))))))).
chr-1.trna356-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-3.trna338-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-5.trna461-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-4.trna279-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-6.trna756-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-7.trna175-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-7.trna176-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-12.trna257-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-7.trna321-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-7.trna407-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-7.trna409-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-11.trna186-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna475-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna447-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna446-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna445-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna444-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-9.trna444-Val-CAC    AGUUCGAACCUGGGAUCAGACA 74
chr-10.trna422-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna410-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna401-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna388-Val-CAC   AGUUCGAACCUGGGAUCAGACA 74
chr-1.trna210-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-2.trna12-Val-CAC     AGUUCGAACCUGGGCUUAGACA 74
chr-2.trna412-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-2.trna445-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-5.trna328-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-6.trna322-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-6.trna331-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-11.trna317-Val-CAC   AGUUCGAACCUGGGCUUAGACA 74
chr-11.trna318-Val-CAC   AGUUCGAACCUGGGCUUAGACA 74
chr-12.trna403-Val-CAC   AGUUCGAACCUGGGCUUAGACA 74
chr-2.trna420-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-9.trna530-Val-CAC    AGUUCGAUCCUGGGCUCAGACA 74
chr-1.trna209-Val-CAC    AGUUCAAACCUGGGCUUAGACA 74
chr-12.trna402-Val-CAC   AGUUCGAACCUGGGCUUAGACA 74
chr-4.trna330-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-11.trna304-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-3.trna268-Val-CAC    AGUUCGAACCUGGGCUCAGACA 74
chr-6.trna440-Val-CAC    AGUUCGAACCUGGGCUUAGACA 74
chr-8.trna59-Val-CAC     AGUUCGAACCUGGGCUCAGACA 74
chr-10.trna432-Val-CAC   AGUUCGAACCUGGGCUCAGACA 74
chr-12.trna386-Val-CAC   AGUUCGAACCUAGGCUCAGACA 74
chr-5.trna176-Val-CAC    AGUACGAACCUUGGCUCAGACA 74
chr-6.trna366-Val-CAC    AGUUCGAACCCGGGCUCAGACA 74
chr-5.trna560-Val-CAC    AGUUCGAGCCUCUCUCGCCCGA 74
chr-10.trna25-Val-CAC    GGUUCAAAUCCGGACGACGCCA 75
chr-6.trna700-Val-CAC    GGUUCAAACCCGGGCGAAGCCA 70
chr-2.trna11-Val-CAC     AGUUCGAACUUGGGCUUAGACA 74
chr-7.trna408-Val-CAC    GGUUCGAACCUGGGCUCAGACA 82
                         .........70........80.
```