```
                                (((.((((...........((....((.((....))))))..(((((....)))))))(((( 
chr-4.trna16-Asp-GTC        GAU-GUA-------GUAUAGU----GGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 48
chr-6.trna168-Asp-GTC       GCA-GUA-------GUAUAGU----GGUGAGUAUCCCGCCUGUCACGCGGGAGACCCGG 48
chr-2.trna212-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCG---GACCCGG 48
chr-4.trna146-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACCCGGGUGACCCGG 51
chr-11.trna142-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGU 51
chr-7.trna168-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCUUGUCACCUGGGUGACUCAG 51
chr-12.trna83-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACCCGGGUGACCCGG 51
chr-6.trna162-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCGCCUGUCACCCGGGAGACCCGG 51
chr-15.trna129-Asp-GTC      GUC-GUUG--UA--GUAUAAU----GGUGAGUAUUCCGCCUGUCACCCGGGUGACCCGG 51
chr-7.trna169-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCUUGUCACCUGGGUCACUCAG 51
chr-4.trna85-Asp-GTC        GUC-GUUG--UA--GUAUAUU----GGUGAGUUUUCCGCCUGUCAUGCGGGUGACCCGG 51
chr-13.trna35-Asp-GTC       GUC-GUUG--UA--AUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna86-Asp-GTC        GUC-GUUG--UA--GUAUAUU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna2-Asp-GTC         GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-2.trna216-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna49-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna51-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-14.trna148-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-14.trna140-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna55-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna147-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna146-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna145-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna41-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna38-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna61-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna36-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna124-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna215-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna147-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna8-Asp-GTC         GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna95-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-1.trna75-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna150-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna124-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna84-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna151-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna155-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna208-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna79-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna78-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna249-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna67-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna198-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna264-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-11.trna109-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna273-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-11.trna106-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna275-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-5.trna276-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna32-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna36-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna37-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna66-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-10.trna96-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-10.trna44-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna167-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna166-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna195-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna45-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna65-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna91-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna94-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna95-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna69-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna66-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna96-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna1-Asp-GTC         GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-8.trna188-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna97-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-8.trna94-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna197-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna156-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-11.trna208-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna133-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna50-Asp-GTC        GUU-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna50-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCUUGUCACGCGGGUGACCCGG 51
chr-9.trna132-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCUGG 51
chr-7.trna93-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCUGG 51
chr-7.trna33-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna36-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna95-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCUGCCUGUCACGCGGGUGACCCGG 51
chr-13.trna148-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCUCGCCUGUCACGCGGGUGACCCGG 51
chr-11.trna108-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCCGCCUGUCACACGGGUGACCCGG 51
chr-6.trna174-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUAAGUAUUCCUGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna8-Asp-GTC         GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACUCGGGUGACCCGG 51
chr-8.trna187-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna61-Asp-GTC        GUU-GUUG--UA--GUAUAGU----GGUAAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-4.trna135-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUAAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna94-Asp-ATC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUAUCACGCGGGUGACCCGG 51
chr-7.trna92-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 51
chr-3.trna37-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna146-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna145-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna144-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCACGCGGGUGACCCGG 51
chr-6.trna115-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCACGCGGGUGACCCGG 51
chr-12.trna143-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCACGCGGGUGACCCAG 51
chr-15.trna128-Asp-GTC      GUC-GUUG--UA--GUAUAGU----GGUAAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna183-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna156-Asp-GTC       GUU-GUUG--UA--GUAUAGU----GGUGAGUAUUCCCGCCUGUCACUCGGGUGACCCGG 51
chr-6.trna159-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCUGCCUGUCACGUGGGAGACCCGG 51
chr-6.trna164-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGCGGGAGACCCGG 51
chr-4.trna235-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGCGGGAGACCCGG 51
chr-6.trna173-Asp-GTC       GUU-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGCAGGAGACCCGG 51
chr-11.trna44-Asp-GTC       GUU-GUUG--UA--GUAUAGU----GGUGAGUAUUUCCGCCUGUCACGCGGACGACCCGG 51
chr-6.trna55-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUUCCGCCUGUCACGCGGACGACCUGG 51
chr-11.trna43-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUAAGUAUUUCCGCCUGUCACGCGGACAACCCGG 51
chr-11.trna22-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUCAGUAUUUCUGCCUGUCACGCGGAUGACCCGG 51
chr-6.trna95-Asp-GTC        GUU-GUUG--UA--GUAUAGU----GGUGAGUAUACCCGCCUGUCAUGUAGGUGACCCGG 51
chr-11.trna143-Asp-GTC      GUC-GUUG--UA--GUGUAGU----GGUGAGUAUUCCCUCCUGUCACGCGGGUGACCCGG 51
chr-13.trna37-Asp-GTC       GUC-GUUG--UA--GUAUGGU----GGUGAGUAUUCCUGCUUGUCACGUGGGUGACCCGG 51
chr-6.trna161-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCAUGCCGGAGACCCGG 51
chr-6.trna165-Asp-GTC       GUU-GUUG--UG--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGCGGGAGACCUGA 51
chr-6.trna166-Asp-GTC       GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCUUGUCACGCGGGAGACCCGG 51
chr-6.trna160-Asp-GTC       GCC-GUUG--UA--GUAUAGU----GGUGAGUGUCCCCGCUUGUCACGCGGGAGACCCGG 51
chr-6.trna170-Asp-GTC       GUC-GUUU--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGCGGGAGACCCGG 51
chr-6.trna171-Asp-GTC       GUC-GUUU--UA--GUAUAGU----GGUGAGUAUCCCUGCCUGUCACGCGGGAGACUCGG 51
chr-6.trna67-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 51
chr-7.trna9-Asp-GTC         GUC-GUUG--UA--GUAUAGU----GGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 51
chr-9.trna44-Asp-GTC        GUC-GUUG--UA--GUAUAGU----GGUGAGUAUCCCCGCCUGUCACGUGGGAGACCCGG 51
chr-10.trna100-Asp-GTC      GUC-GUUG--UAGUGUAUAGU----GGUGAGUAUUCUCGCCUGUCACGUAGGUGUCCCGG 53
chr-3.trna155-Asp-GTC       GUU-GGAGAUUGUAGUAUAGU----GGUGAGUAUUCCCGCCUGUCACGCGGGUGACCCGG 55
chr-6.trna167-Asp-GTC       GUU-GUUG--UA--GUAUAGU----GGUGAGUAUCCCUGCUUGUCACGCGG-AGACCCGG 50
chr-12.trna81-Asp-GTC       CUCAGUCG--UA--GUAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 52
chr-4.trna227-Asp-GTC       GCCAUUUUGAUGAUGUAGUAUAGU-GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 59
chr-12.trna82-Asp-GTC       GUCGUUGUAGUAUAGUGGUGAGUAUGGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 60
chr-10.trna113-Asp-GTC      GCA-CCAG--UG--GUCUAGUGGUAGAAUAGUACCCUGUCACGAUACAGACCCGGACCCG 55
chr-12.trna48-Asp-GTC       GCA-CCAG--UG--GUCUAGUGGUAGAAUAGUACCCUGUCACGGUACAGA------CCCG 49
chr-6.trna35-Asp-GTC        GGAUUUU--------UAUAGU----GGUGAGUAUUCCGCCUGUCACGCGGGUGACCCGG 48
chr-10.trna173-Asp-GTC      GGG-AUUG--UA--GUUCAAU---UGGUCAGAGCACCGCCCUGUCAAGGCGGAAGCUGCG 52
                            .........10........20........30........40........50.........
```



```
                            (........)))))...)))))))). 
chr-4.trna16-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 69
chr-6.trna168-Asp-GTC       G-UUCGAUACCCGA---CAACAGCG 69
chr-2.trna212-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 69
chr-4.trna146-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-11.trna142-Asp-GTC      G-UUCGAUCCCCGA---CAACGGCG 72
chr-7.trna168-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna83-Asp-GTC       G-UUCGAUCCCCAG---CAACGGCG 72
chr-6.trna162-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-15.trna129-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna169-Asp-GTC       G-UUCGAUCCUGG---CAACGGCG 72
chr-4.trna85-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna35-Asp-GTC       G-UUCGAUCCCCGU---CAACGGCG 72
chr-9.trna86-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna2-Asp-GTC         G-UUCGAUCCCCGG---CAACGGCG 72
chr-2.trna216-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna49-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna51-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-14.trna148-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-14.trna140-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna55-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna147-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna146-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna145-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna41-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna38-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna61-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna36-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-3.trna124-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna215-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna147-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna8-Asp-GTC         G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna95-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-1.trna75-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna150-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna124-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna84-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna151-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna155-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna208-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna79-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-12.trna78-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna249-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna67-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna198-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna264-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-11.trna109-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna273-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-11.trna106-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna275-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-5.trna276-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna32-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna36-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna37-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna66-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-10.trna96-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-10.trna44-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna167-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna166-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna195-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna45-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna65-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna91-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna94-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna95-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna69-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna66-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna96-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna1-Asp-GTC         G-UUCGAUCCCCGG---CAACGGCG 72
chr-8.trna188-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna97-Asp-GTC        G-UUCGAUCCCCGG---CAAUGGCG 72
chr-8.trna94-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna197-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna156-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-11.trna208-Asp-GTC      G-UUCGAUCCCCGG---CGACGGCG 72
chr-9.trna133-Asp-GTC       G-UUCGAUCCCCGG---CGACGGCG 72
chr-3.trna50-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna50-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna132-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna93-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-7.trna33-Asp-GTC        G-UUCGAUCCCCGG---CAACGGUG 72
chr-7.trna36-Asp-GTC        G-UUCGAUCCCCGG---CAACGGUG 72
chr-9.trna95-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-13.trna148-Asp-GTC      G-UUCGAUCCCCGG---CAAUGGCG 72
chr-11.trna108-Asp-GTC      G-UUCGAUCCCCGG---CAACGGCG 72
chr-6.trna174-Asp-GTC       G-UUUGAUCCCCGG---CAACGGCG 72
chr-7.trna8-Asp-GTC         G-UUCGAUCCCCGG---CAACGGCG 72
chr-8.trna187-Asp-GTC       G-UUCGAUCCCUGG---CAACGGCG 72
chr-4.trna61-Asp-GTC        G-UUCGAUCCCCGG---CAACGGCG 72
chr-4.trna135-Asp-GTC       G-UUCGAUCCCCGG---CAACGGCG 72
chr-9.trna94-Asp-ATC        G-UUCGAUCCCGA---CAACGGCG 72
chr-7.trna92-Asp-GTC        G-UUCGAUCCAGG---CAACGGCG 72
chr-3.trna37-Asp-GTC        G-UUCGAUCCCGG---CAACGGCG 72
chr-12.trna146-Asp-GTC      G-UUCGAUCCCGG---CAACGGCG 72
chr-12.trna145-Asp-GTC      G-UUCGAUCCCGG---CAACGGCG 72
chr-12.trna144-Asp-GTC      G-UUCGAUCCCGG---CAACGGCG 72
chr-6.trna115-Asp-GTC       G-UUCGAUCCCGG---CAACGGCG 72
chr-12.trna143-Asp-GTC      G-UUCGAUCCCGG---CAACGGCG 72
chr-15.trna128-Asp-GTC      G-UUCGAUCCCGG---AAACGGCG 72
chr-7.trna183-Asp-GTC       --UUCGAUCCCGG---CAACGGCG 71
chr-9.trna156-Asp-GTC       G-UUUGAUCCCGG---CAAUGGUG 72
chr-6.trna159-Asp-GTC       G-UUCAAUCCCGG---CAACGGCG 72
chr-6.trna164-Asp-GTC       G-UUCGAUCCCGG---CAACGGCG 72
chr-4.trna235-Asp-GTC       G-UUCGAUCCUCGG---CAACGGCG 72
chr-6.trna173-Asp-GTC       G-UUUGAUCCCGG---CAACGGCG 72
chr-11.trna44-Asp-GTC       G-UUCGAUCCCGG---CAACGGCA 72
chr-6.trna55-Asp-GTC        G-UUCGAUCCCGG---CAACGGCG 72
chr-11.trna43-Asp-GTC       G-UUUGAUCCCGG---CAACGGCG 72
chr-11.trna22-Asp-GTC       G-UUCGGUCCCGG---CAACGGCG 72
chr-6.trna95-Asp-GTC        G-UUCGAACCCGG---CAACGACG 72
chr-11.trna143-Asp-GTC      GGUUCGAUCCCGG---CAACGGCG 73
chr-13.trna37-Asp-GTC       G-UUCGAUCCUCGG---CAAUGGUA 72
chr-6.trna161-Asp-GTC       G-UUCGAUUCCCGA---CAACGGUG 72
chr-6.trna165-Asp-GTC       G-UUUGAUGCUCGG---CAACGGCG 72
chr-6.trna166-Asp-GTC       G-UUCGAUCCCGA---CAACGUCG 72
chr-6.trna160-Asp-GTC       G-UUCGAUACCCGA---CAACAUCG 72
chr-6.trna170-Asp-GTC       G-UUUGAUCCCGG---CAACGCCG 72
chr-6.trna171-Asp-GTC       G-UUCGAACCCGG---CAACGACG 72
chr-6.trna67-Asp-GTC        G---UGAACCCGGG---CAACGGCG 70
chr-7.trna9-Asp-GTC         G-UUCGAUCC---G---CAACGGCG 69
chr-9.trna44-Asp-GTC        G-UUCGUUCCCUGG---CAACAACG 72
chr-10.trna100-Asp-GTC      G-UUCGAUCCCGG---CAACGGUG 74
chr-3.trna155-Asp-GTC       G-UUUGAUCCCGG---CAACGGCG 76
chr-6.trna167-Asp-GTC       G-UUUGAUACCCGA---CAACAACG 71
chr-12.trna81-Asp-GTC       G-UUCGAUCCCGGCAAUGGCGAGA 76
chr-4.trna227-Asp-GTC       G-UUCGAUCCCGG---CAACGGCG 80
chr-12.trna82-Asp-GTC       G-UUCGAUCCCGG---CAACGGCG 81
chr-10.trna113-Asp-GTC      GGUUCGAUUCCCGG---CUGGUGCA 77
chr-12.trna48-Asp-GTC       GGUUCGAUUCCCGG---CUGGUGCA 71
chr-6.trna35-Asp-GTC        G-UUCGUUCCCGGCAACGGCGCCA 72
chr-10.trna173-Asp-GTC      GGUUCGAGUCCCGAC--GGAUCCUG 75
                            .........70........80....
```