```
                         (((((((....((((((.....)).))))...(((((((.....)))))).))))))..
chr-1A.trna4-Met-CAT     GGGCUUA--UAGUUUAA-UUGGUUGAAAUGUACCGCUCAUAACGGUGAUA-UUGUAGGUU 56
chr-3C.trna80-Met-CAT    GGGCUUA--UAGUUUAA-UUGGUUGAAACGUACCGCUCAUAACGGUGAUA-UUGUAGGUU 56
chr-1A.trna2-Met-CAT     GGGCUUA--UAGUUUAA-UUGGUUGAAAUGUACCGCUCAUAACGGUGAUA-UUGUAGGUU 56
chr-3C.trna3-Met-CAT     -GGGGGUGGUGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 57
chr-3C.trna5-Met-CAT     UGGGGGUGGUGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 58
chr-7D.trna70-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7A.trna90-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7D.trna16-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7D.trna6-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7D.trna15-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7C.trna18-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7C.trna17-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1A.trna81-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1A.trna89-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7B.trna13-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7A.trna99-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7A.trna98-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1B.trna67-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7A.trna7-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5D.trna55-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5C.trna57-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5C.trna5-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5B.trna68-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5A.trna23-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-5A.trna22-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4D.trna77-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1C.trna27-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4D.trna8-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4C.trna72-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4C.trna4-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1C.trna62-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4B.trna7-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4B.trna2-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4A.trna17-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4A.trna5-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-4A.trna4-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1D.trna26-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1D.trna36-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2D.trna71-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2D.trna70-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2D.trna54-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2A.trna41-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna61-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna45-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2A.trna58-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna36-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna5-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2B.trna103-Met-CAT   GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2B.trna61-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2B.trna60-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2A.trna96-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2A.trna62-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2A.trna59-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna91-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7C.trna16-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7C.trna69-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7C.trna10-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGGGUCGAGAGUU 57
chr-4B.trna75-Met-CAT    GGGAUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-2C.trna37-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7D.trna5-Met-CAT     GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUUUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-1D.trna57-Met-CAT    GGAGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGGGG-UCGAGAGUU 56
chr-4D.trna14-Met-CAT    GGAGGGG--UGUCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCGAGAGUU 56
chr-7D.trna69-Met-CAT    GGGGUGG--UGGCGCAG-UUGGCUAGCGCGUAGGUCUCAUAAUCCUGAGG-UCCAGAGUU 56
chr-8A.trna33-Met-CAT    AGCAGAG--UAGAGCAGUUUUGGUAGCUCACAAGGCUCAUAACCUUGAGG-UCACGGGUU 57
chr-8A.trna6-Met-CAT     AGCAGAG--UAGAGCAG-UUUGGUAGCUCACAAGGCUCAUAACCUUGAGG-UCACGGGUU 56
chr-8B.trna39-Met-CAT    AGCAGAG--UAGAGCAG-UUUGGUAGCUCACAAGGCUCAUAACCUUGAGG-UCACGGGUU 56
chr-8D.trna32-Met-CAT    AGUAGAG--UAGAGCAG-UUUGGUAGCUCACAAGGCUCAUAACCUUGAGG-UCAUGGGUU 56
chr-1D.trna83-Met-CAT    ACCUACU--UGACUCAG--CGGUUAGAGUAUCGCUUUCAUACGGCGAGAG-UCAUUGGUU 55
chr-1D.trna87-Met-CAT    ACCUACU--UGACUCAG--CGGUUAGAGUAUCGCUUUCAUACGGCGAGAG-UCAUUGGUU 55
chr-6C.trna71-Met-CAT    ACCUACU--UGACUCAG--CGGUUAGAGUAUCGCUUUCAUACGGCGAGAG-UCAUUGGUU 55
chr-8C.trna11-Met-CAT    GCCUACU--UAACUCAG--UGGUUAGAGUAAUGCUUUCAUACGGCGGGAG-UCAUUGGUU 55
chr-1D.trna53-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCCAACUCAUAAUUGGUAAAUUUUCGGGUU 56
chr-5B.trna30-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUCAAGCGCCCAACUCAUAAUUGGUAAAUUUGCGGGUU 56
chr-3A.trna18-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCCAACUCAUAAUUGGUAAAUUUGCGAGUU 56
chr-3A.trna19-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCCAACUCAUAAUUGGUAAAUUUGCGAGUU 56
chr-3B.trna39-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCUAACUCAUAAUUGGUAAAUUUGUGAGUU 56
chr-3B.trna40-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCUAACUCAUAAUUGGUAAAUUUGUGAGUU 56
chr-3A.trna34-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCACACUCAUAAUUGGUAAAUUUGCGGGUU 56
chr-3B.trna25-Met-CAT    GCAUCCA--UGGCUGAA--UGGUUAAAGCGCCACACUCAUAAUUGGUAAAUUUGCGGGUU 56
chr-5A.trna24-Met-CAT    UACUUGA---GGCUGAA--UGGUUAAAGCGCCCAACUCAUAAUUGGUAAAUUUGCGGGUU 55
chr-4B.trna24-Met-CAT    AGCGGGG--UAGAGGAA-UUGGUCGACUCAUCAGGCUCAUGACCUGAAGA-CUGCAGGUU 56
chr-7A.trna54-Met-CAT    -GCGAGG--UAGAGGAA-UUGGUCGACUCAUUAGGCUCAUGACCUGAAGA-CUGUAGGUU 55
                         .........10........20........30........40........50.........
```

```
                         .....)))))))....)))))...
chr-1A.trna4-Met-CAT     CGAGCCCUACUA----AGUCCA-- 74
chr-3C.trna80-Met-CAT    CGAGCCCUACUA----AGCCCA-- 74
chr-1A.trna2-Met-CAT     CGAGCCCUACUA----AGUCCA-- 74
chr-3C.trna3-Met-CAT     CGAGCCUCUCAC----CCC--A-- 73
chr-3C.trna5-Met-CAT     CGAGCCUCUCAC----CCCAAA-- 76
chr-7D.trna70-Met-CAT    CGAGCCUCUCUC----ACCCAA-- 74
chr-7A.trna90-Met-CAT    CGAGCCUCUCUC----ACCCAA-- 74
chr-7D.trna16-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7D.trna6-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-7D.trna15-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7C.trna18-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7C.trna17-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-1A.trna81-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-1A.trna89-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7B.trna13-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7A.trna99-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7A.trna98-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-1B.trna67-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7A.trna7-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-5D.trna55-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-5C.trna57-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-5C.trna5-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-5B.trna68-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-5A.trna23-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-5A.trna22-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4D.trna77-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-1C.trna27-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4D.trna8-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-4C.trna72-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4C.trna4-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-1C.trna62-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4B.trna7-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-4B.trna2-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-4A.trna17-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4A.trna5-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-4A.trna4-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-1D.trna26-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-1D.trna36-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2D.trna71-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2D.trna70-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2D.trna54-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2A.trna41-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna61-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna45-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2A.trna58-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna36-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna5-Met-CAT     CGAGCCUCUCUC----ACCCCA-- 74
chr-2B.trna103-Met-CAT   CGAGCCUCUCUC----ACCCCA-- 74
chr-2B.trna61-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2B.trna60-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2A.trna96-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2A.trna62-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2A.trna59-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna91-Met-CAT    CGAGCCCCUCUC----ACCCCA-- 74
chr-7C.trna16-Met-CAT    CGAGCCUCACGC----ACCCCA-- 74
chr-7C.trna69-Met-CAT    CGAGCCUCACGC----ACCCCA-- 74
chr-7C.trna10-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 75
chr-4B.trna75-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-2C.trna37-Met-CAT    CGAGCCUGUCUC----ACCCCA-- 74
chr-7D.trna5-Met-CAT     CGAG-CUCUCUC----ACCCCA-- 73
chr-1D.trna57-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-4D.trna14-Met-CAT    CGAGCCUCUCUC----ACCCCA-- 74
chr-7D.trna69-Met-CAT    CGAGCCU--CUC----ACCCCC-- 72
chr-8A.trna33-Met-CAT    UGAUUCCCGUCU----UCGCAC-- 75
chr-8A.trna6-Met-CAT     CGAUUCCCGUCU----UCGCAC-- 74
chr-8B.trna39-Met-CAT    CGAUUCCUGUCU----UCGCAC-- 74
chr-8D.trna32-Met-CAT    UGAUUCCCGUCU----UCGCACUU 76
chr-1D.trna83-Met-CAT    CAAAUCCAAUAG----UAGGUA-- 73
chr-1D.trna87-Met-CAT    CAAAUCCAAUAG----UAGGUA-- 73
chr-6C.trna71-Met-CAT    CAAAUCCAAUAG----UAGGUA-- 73
chr-8C.trna11-Met-CAT    CAAAUCCAAUAG----UAGGUA-- 73
chr-1D.trna53-Met-CAT    CAAUUCCUGCUG----GAUGCA-- 74
chr-5B.trna30-Met-CAT    CAAUUCCUGUUG----GAUGCA-- 74
chr-3A.trna18-Met-CAT    CAAUUCUUGUUG----GAUGCA-- 74
chr-3A.trna19-Met-CAT    CAAUUCUUGUUG----GAUGCA-- 74
chr-3B.trna39-Met-CAT    CAAUUCUUGUUG----GAUGCA-- 74
chr-3B.trna40-Met-CAT    CAAUUCUUGUUG----GAUGCA-- 74
chr-3A.trna34-Met-CAT    CAAUUCCUGCUG----GAUGCA-- 74
chr-3B.trna25-Met-CAT    CAAUUCCUGCUG----GAUGCA-- 74
chr-5A.trna24-Met-CAT    CAAUUCCUGUUGGAUAAGGUAA-- 77
chr-4B.trna24-Met-CAT    CGAAUCCUGUCC----CCGCCU-- 74
chr-7A.trna54-Met-CAT    UGAAUCCUGUCC----CCACCU-- 73
                         .........70........80...
```