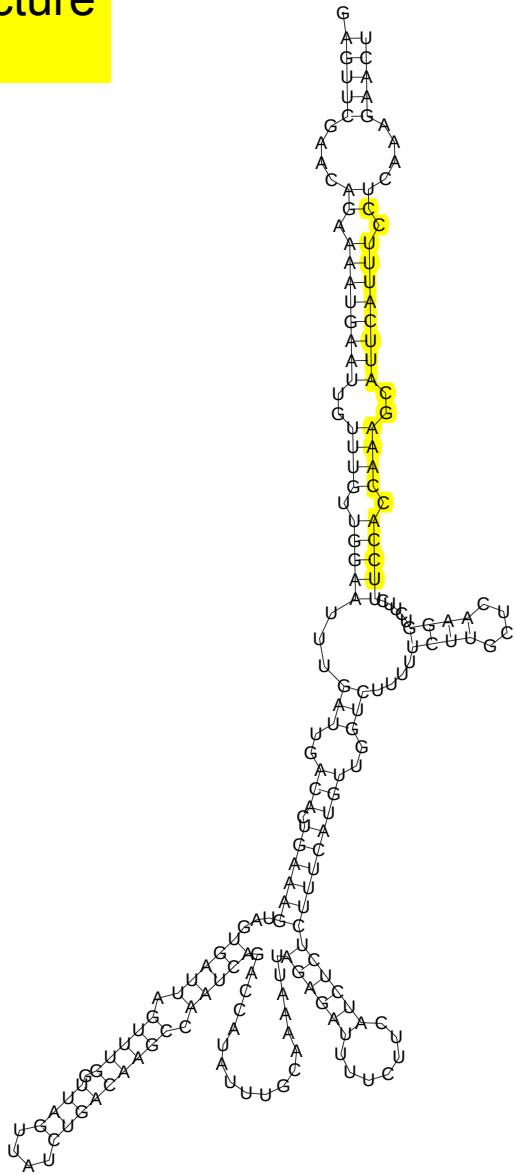
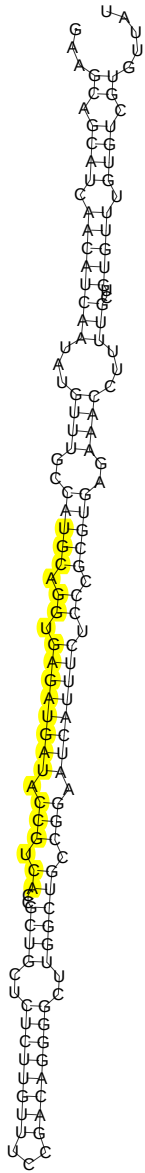
Additional file 1: Predicted secondary structures of known and novel miRNAs. The mature miRNA sequences are highlighted in yellow. For novel miRNAs, the miRNA* sequences are highlighted in gray.

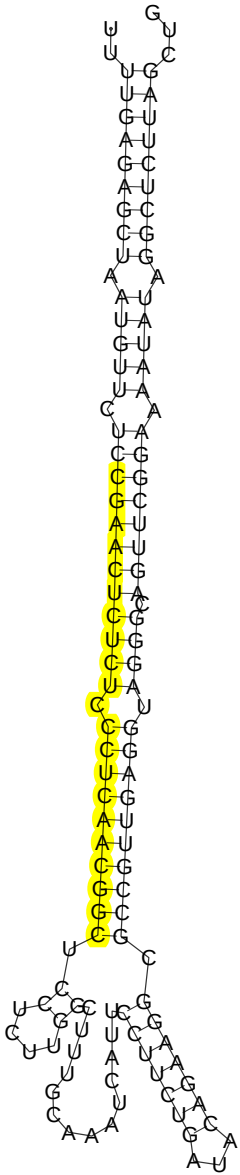
Secondary structure for miR1092.2



Secondary structure for miR1432a

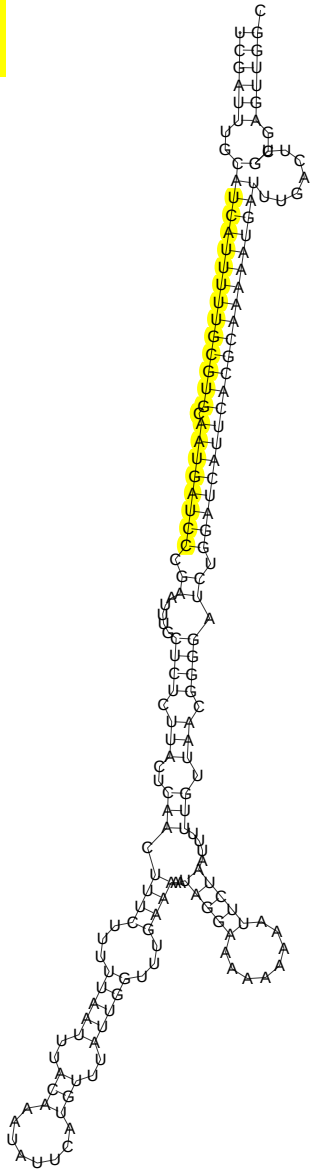


Secondary structure for miR1446

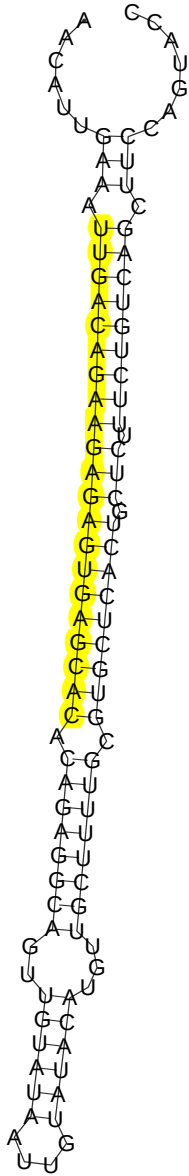


Secondary structure for miR1507a.2

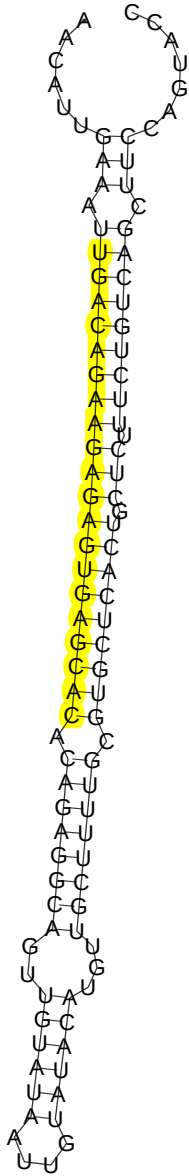
Secondary structure for miR1515



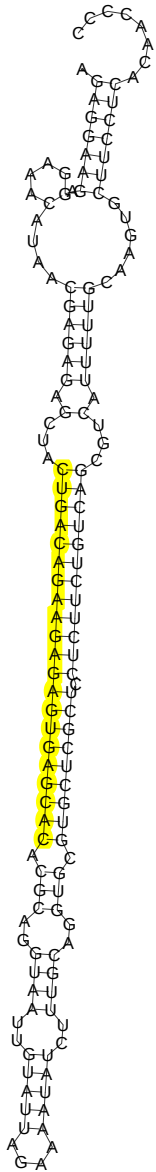
Secondary structure for miR156a.1



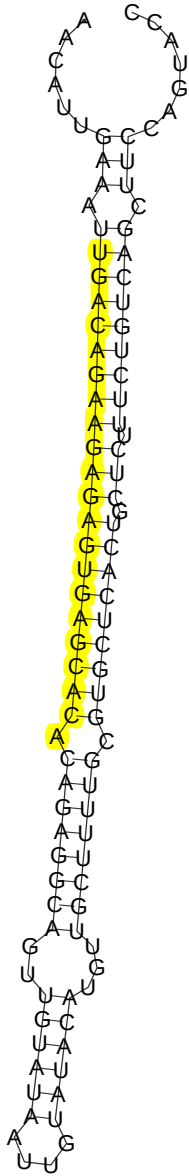
Secondary structure for miR156a.2



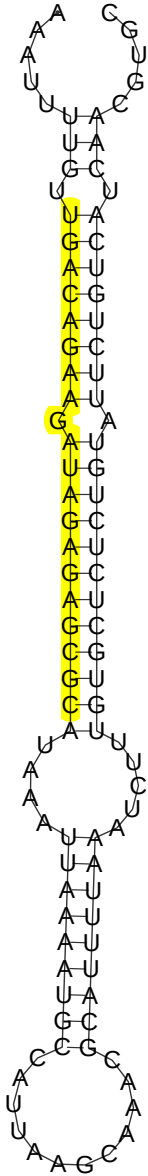
Secondary structure for miR156b.1



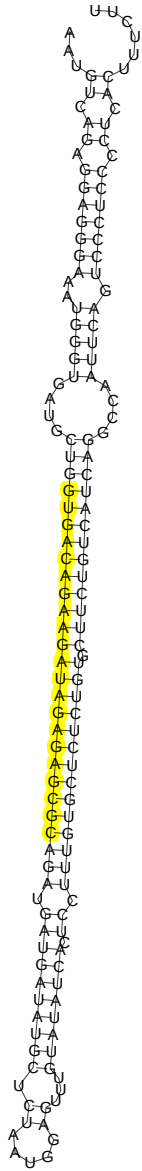
Secondary structure for miR156c.1



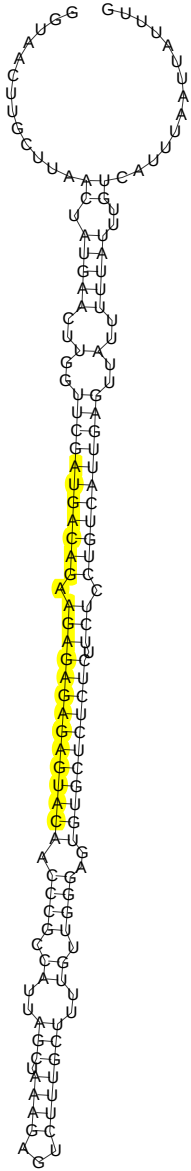
Secondary structure for miR156d



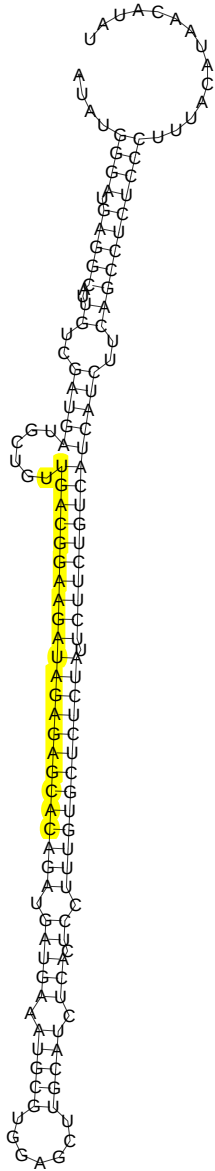
Secondary structure for miR156e



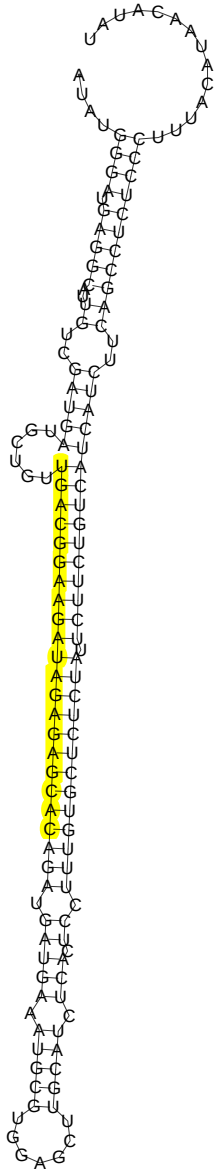
Secondary structure for miR156f.2



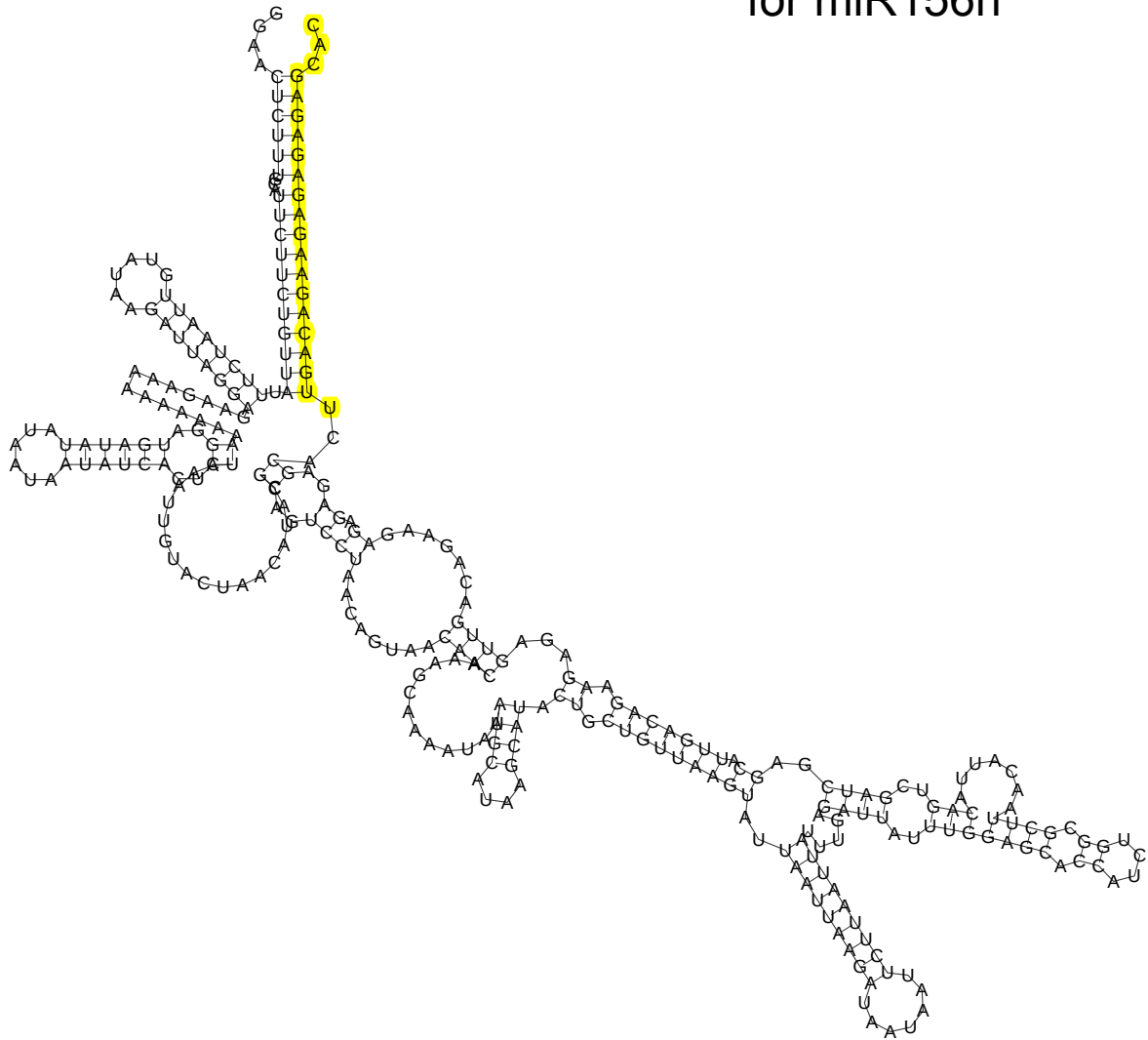
Secondary structure for miR156g.1



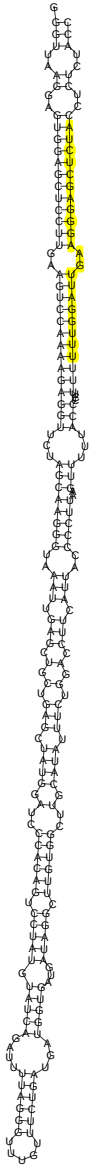
Secondary structure for miR156g.2



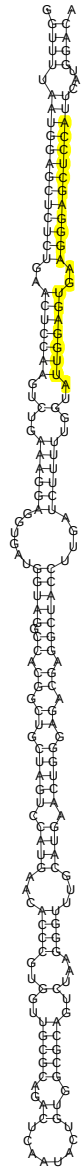
Secondary structure for miR156h



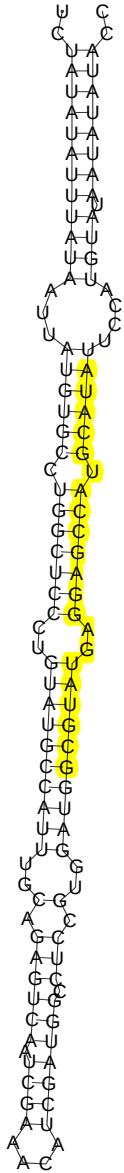
Secondary structure for miR159



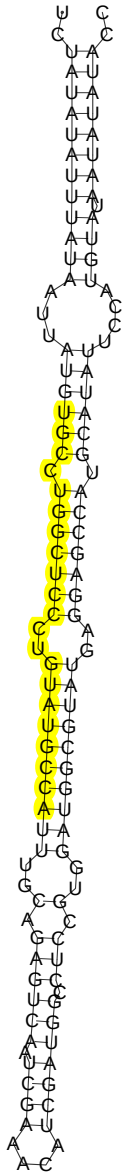
Secondary structure for miR159b



Secondary structure for miR160a-3p

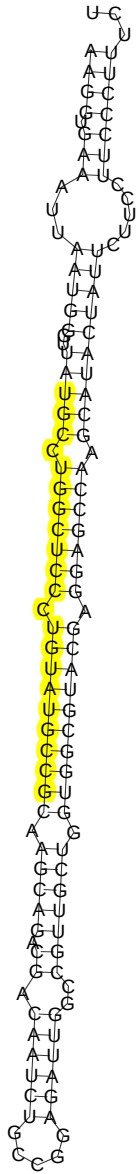


Secondary structure for miR160a-5p

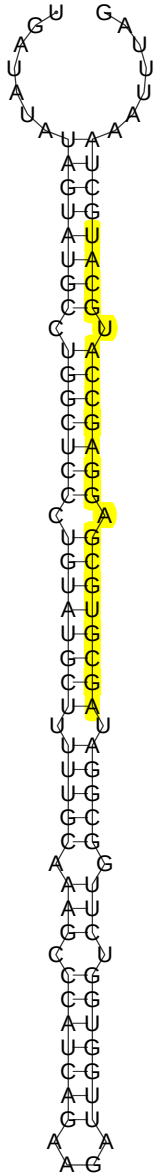


Secondary structure for miR160b-3p

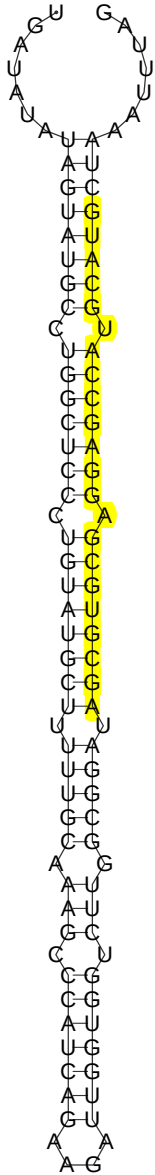
Secondary structure for miR160b-5p



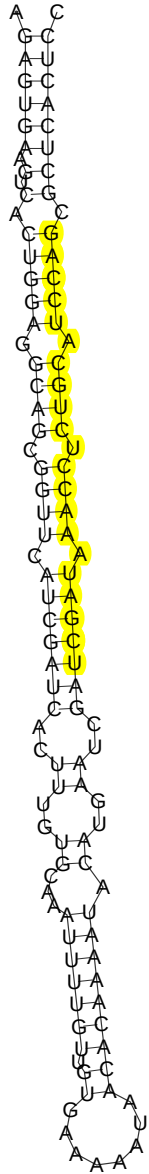
Secondary structure for miR160c.1



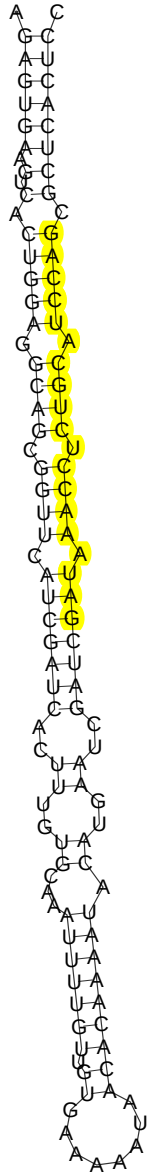
Secondary structure for miR160c.2



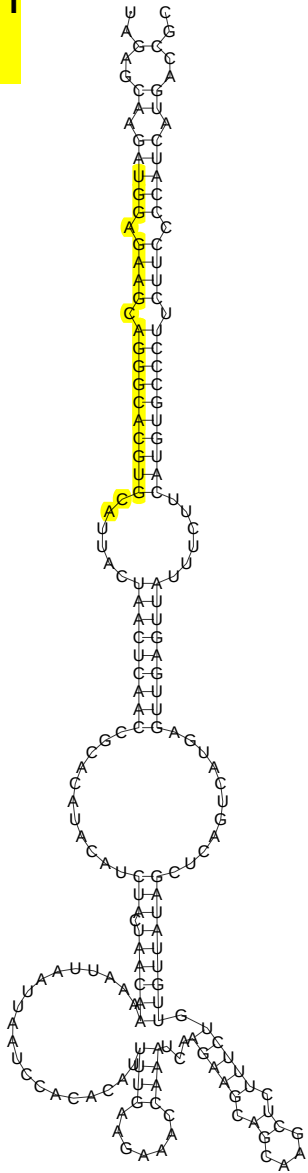
Secondary structure for miR162-3p.1



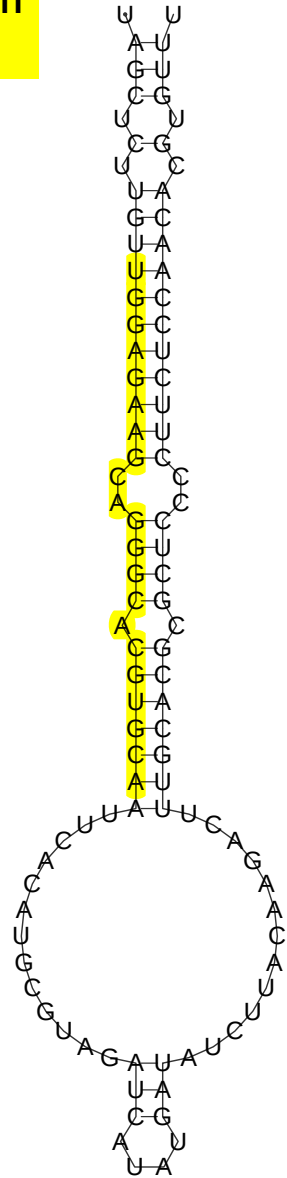
Secondary structure for miR162-3p.2



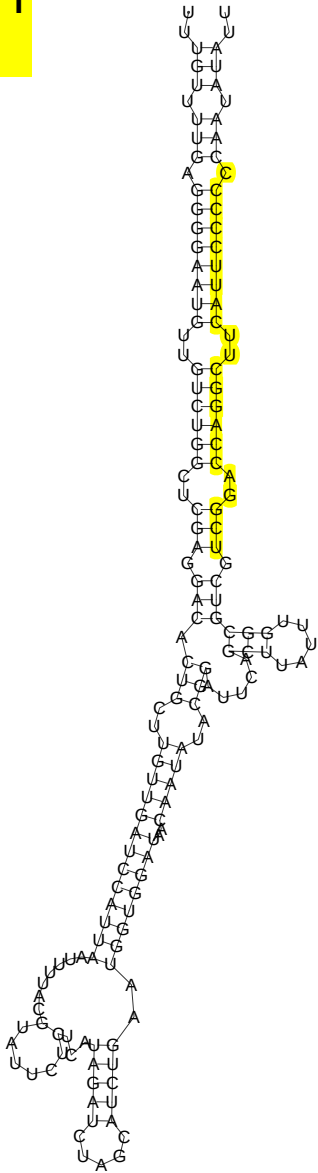
Secondary structure I for miR164



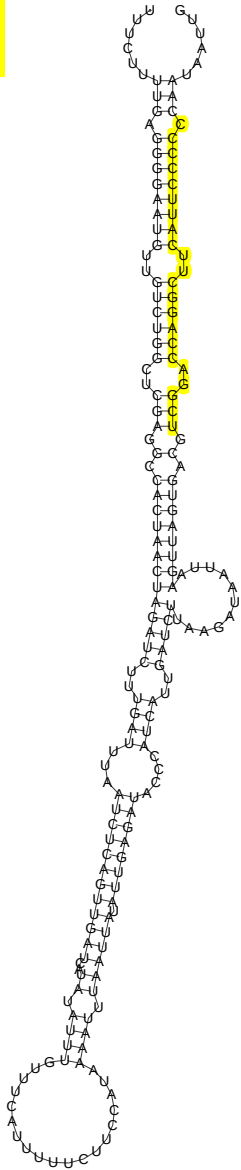
Secondary structure II for miR164



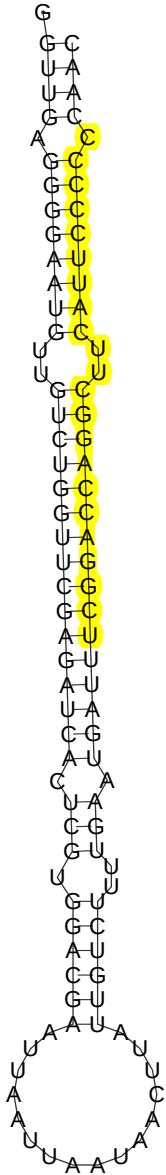
Secondary structure I for miR166a.1



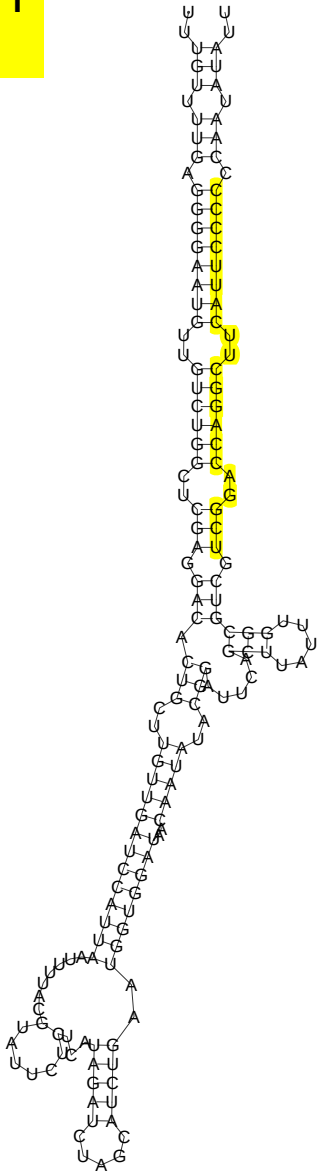
Secondary structure II for miR166a.1



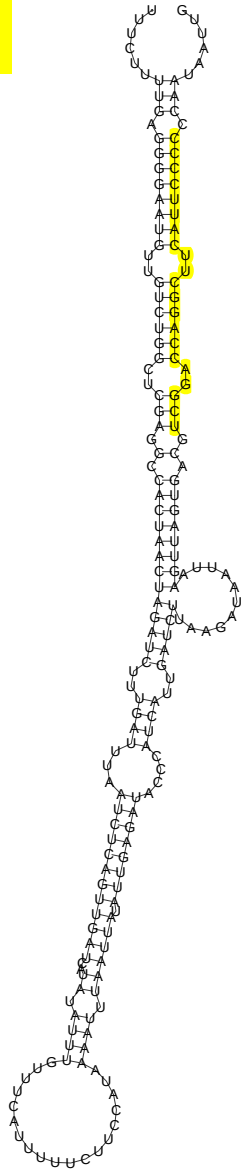
Secondary structure III
for miR166a.1



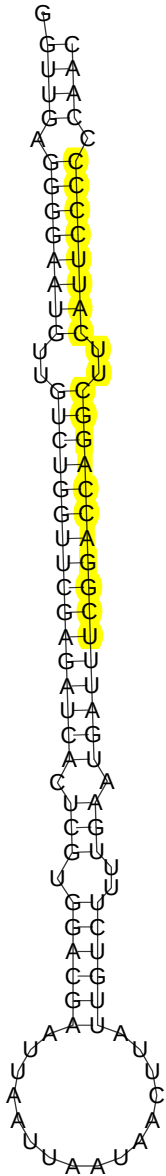
Secondary structure I for miR166a.2



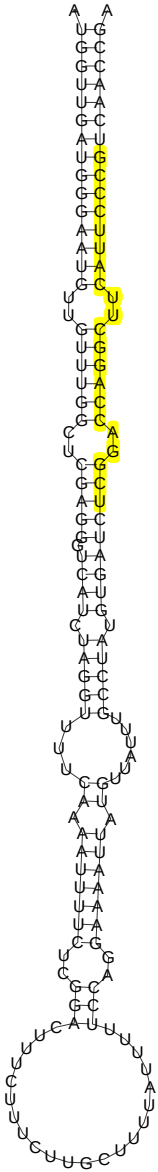
Secondary structure II for miR166a.2



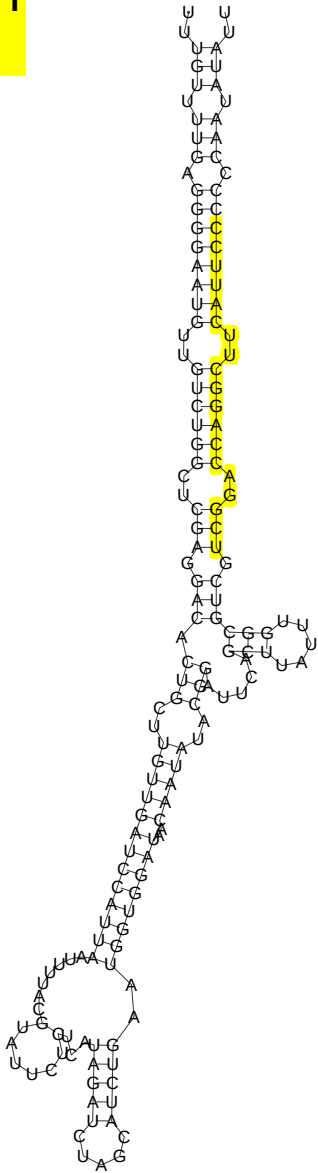
Secondary structure III for miR166a.2



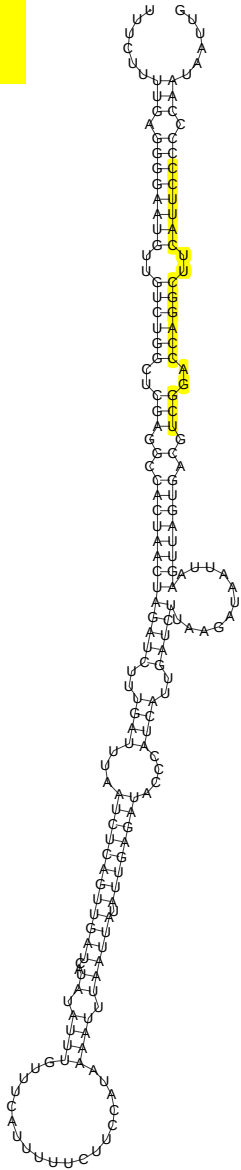
Secondary structure for miR166b



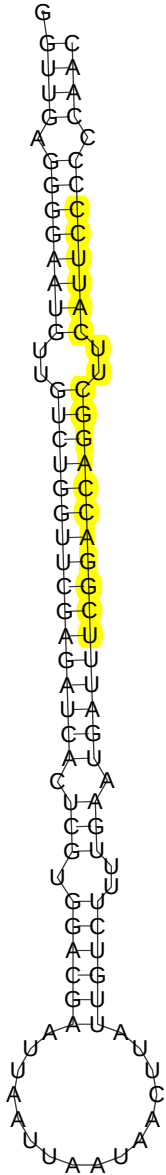
Secondary structure I
for miR166c.1



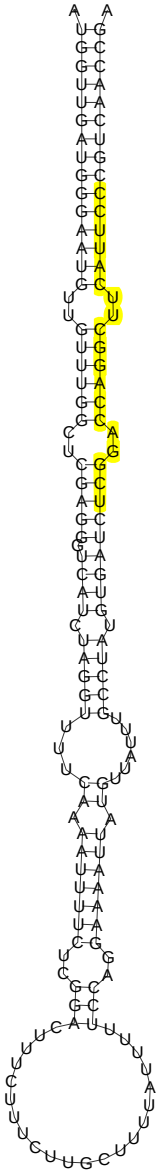
Secondary structure II for miR166c.1



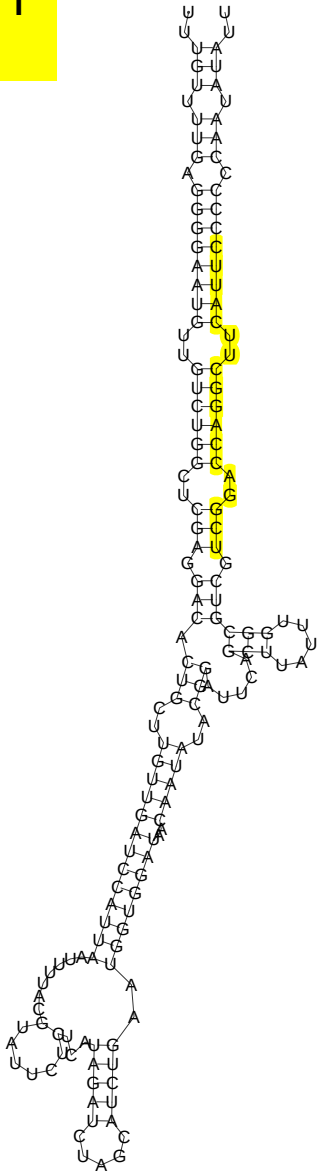
Secondary structure III for miR166c.1



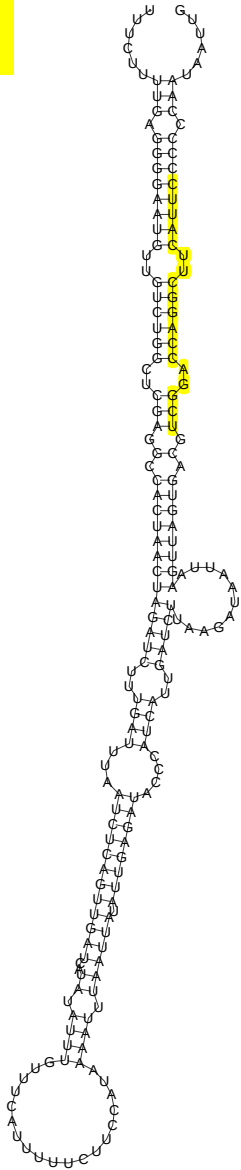
Secondary structure IV for miR166c.1



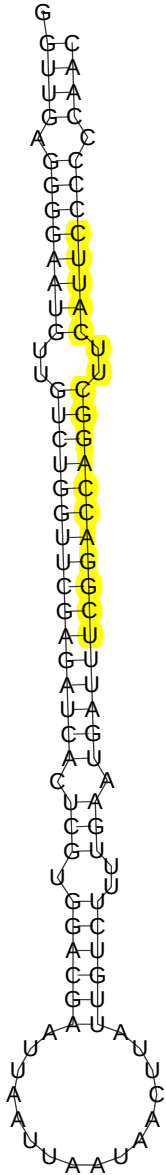
Secondary structure I for miR166c.2



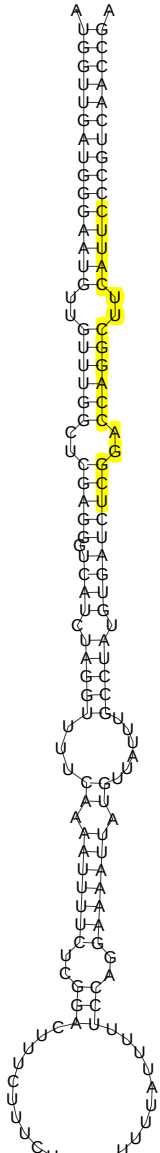
Secondary structure II
for miR166c.2



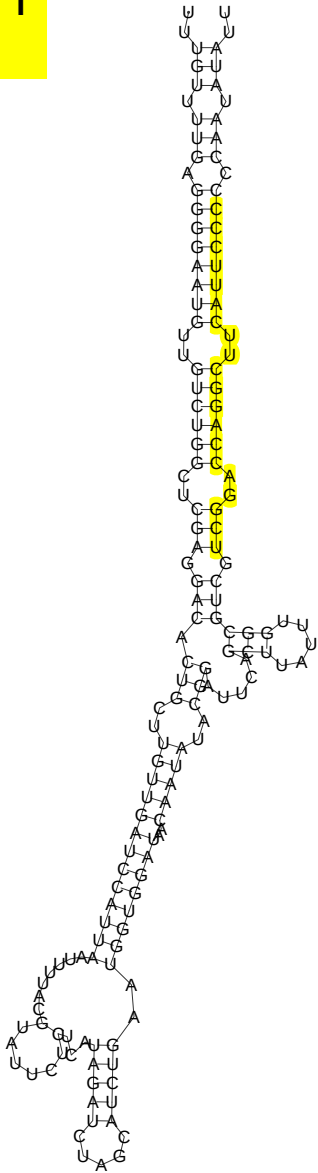
Secondary structure III for miR166c.2



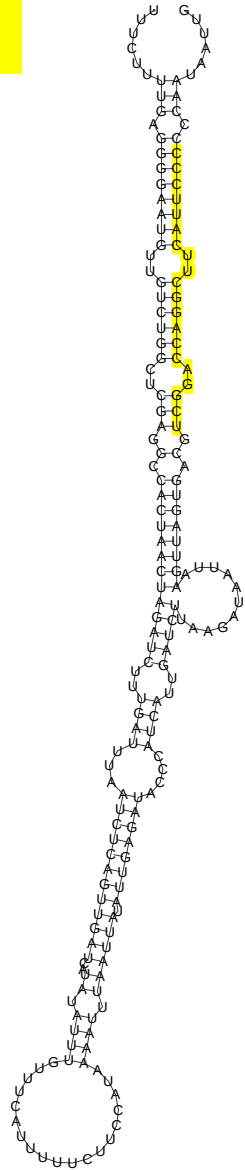
Secondary structure IV for miR166c.2



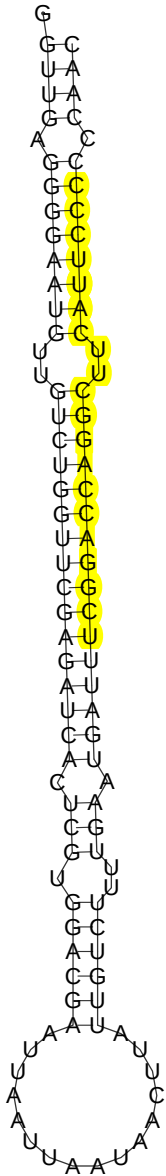
Secondary structure I for miR166c.3



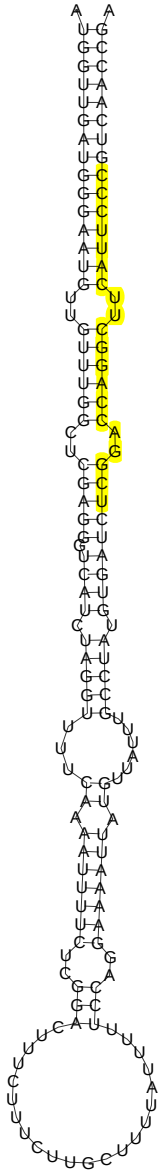
Secondary structure II
for miR166c.3



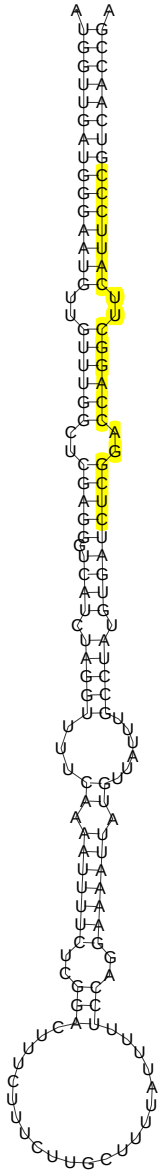
Secondary structure III for miR166c.3



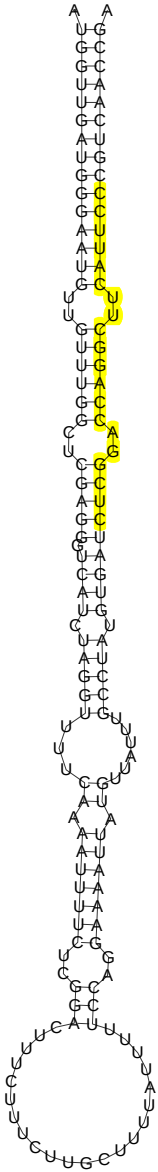
Secondary structure IV for miR166c.3



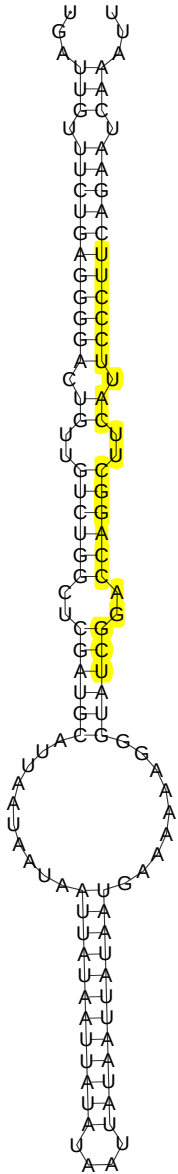
Secondary structure for miR166c.4



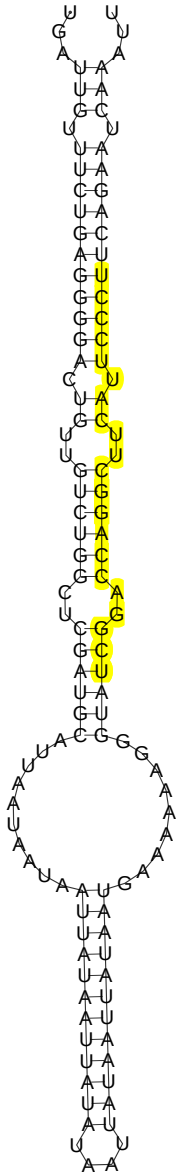
Secondary structure for miR166c.5



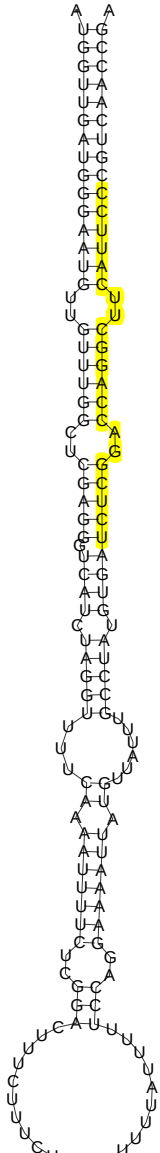
Secondary structure for miR166d.1



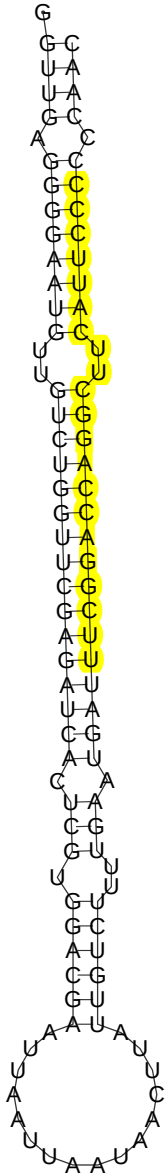
Secondary structure for miR166d.2



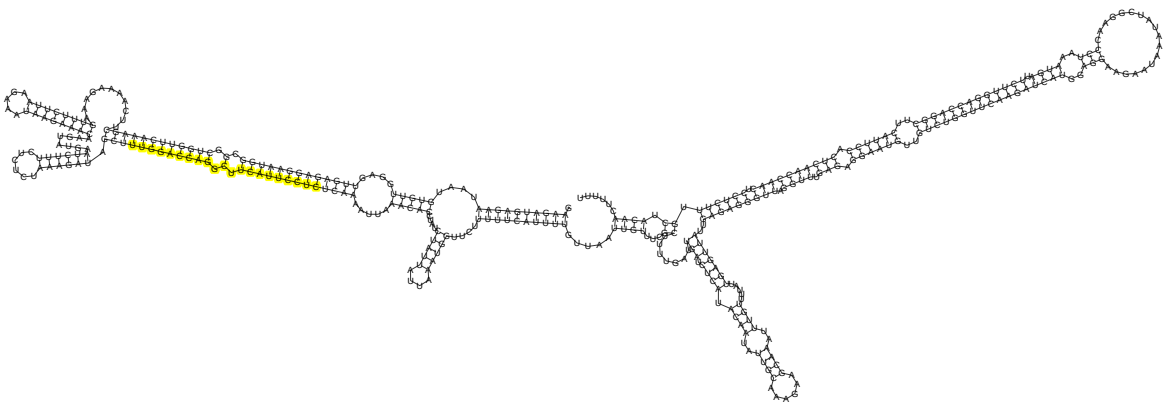
Secondary structure for miR166g.1



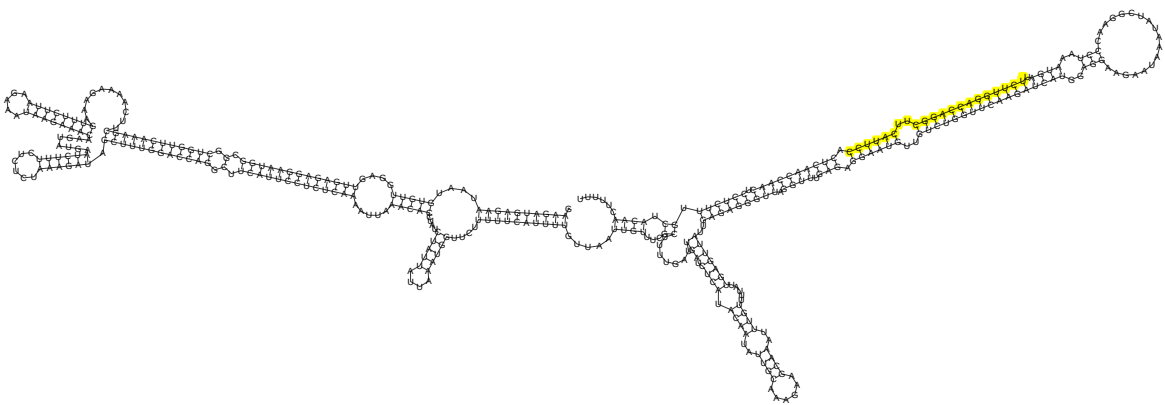
Secondary structure for miR166i



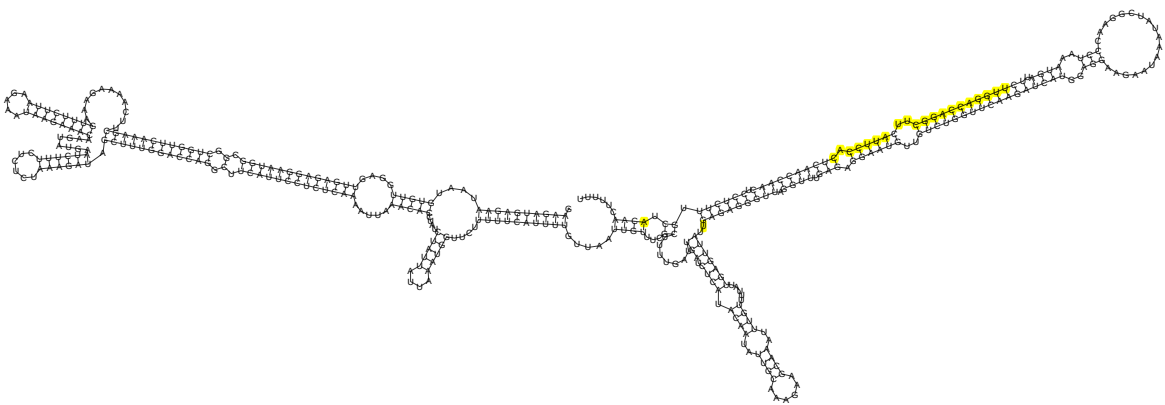
Secondary structure for miR166j.1



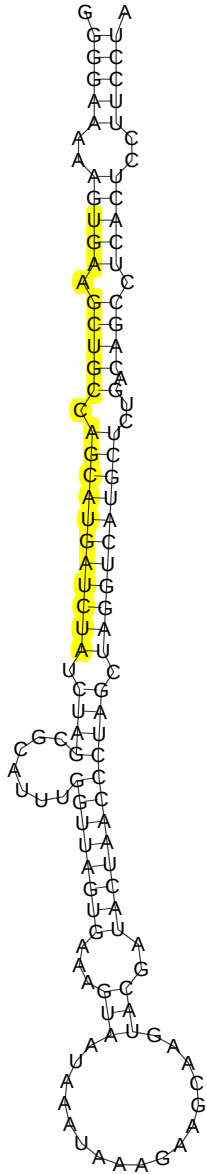
Secondary structure for miR166j.2



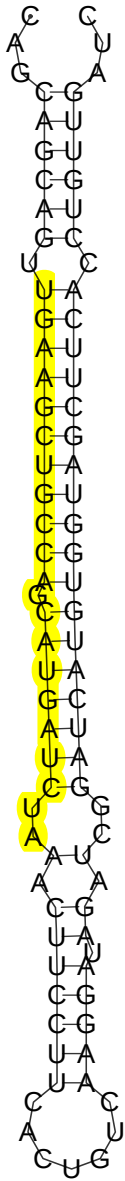
Secondary structure for miR166j.3



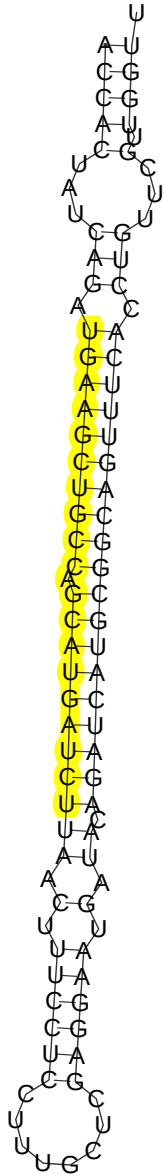
Secondary structure I for miR167a.1



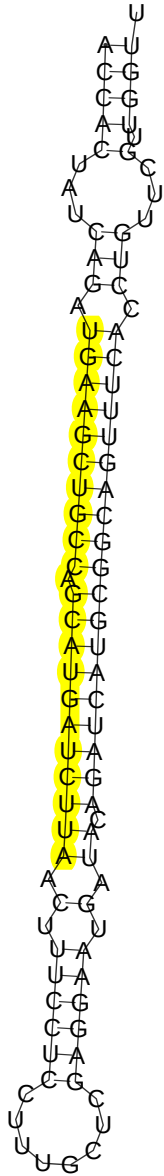
Secondary structure II for miR167a.1



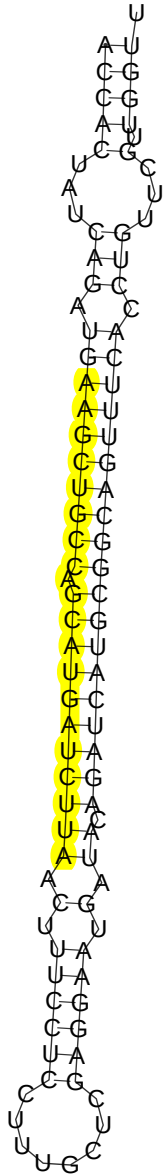
Secondary structure for miR167b.1



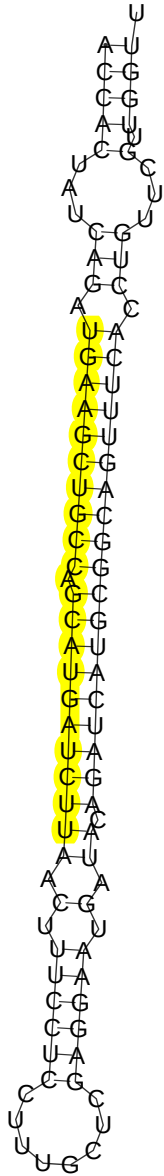
Secondary structure for miR167b.2



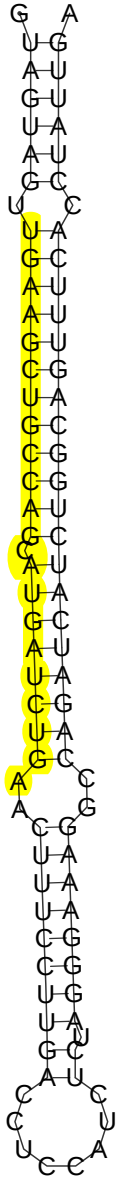
Secondary structure for miR167b.3



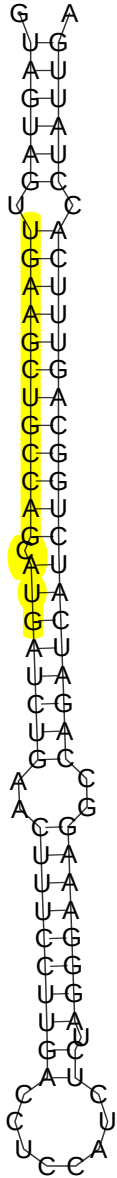
Secondary structure for miR167b.4



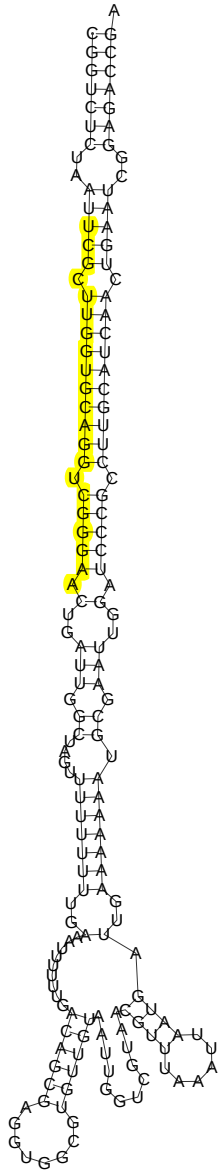
Secondary structure for miR167d.1



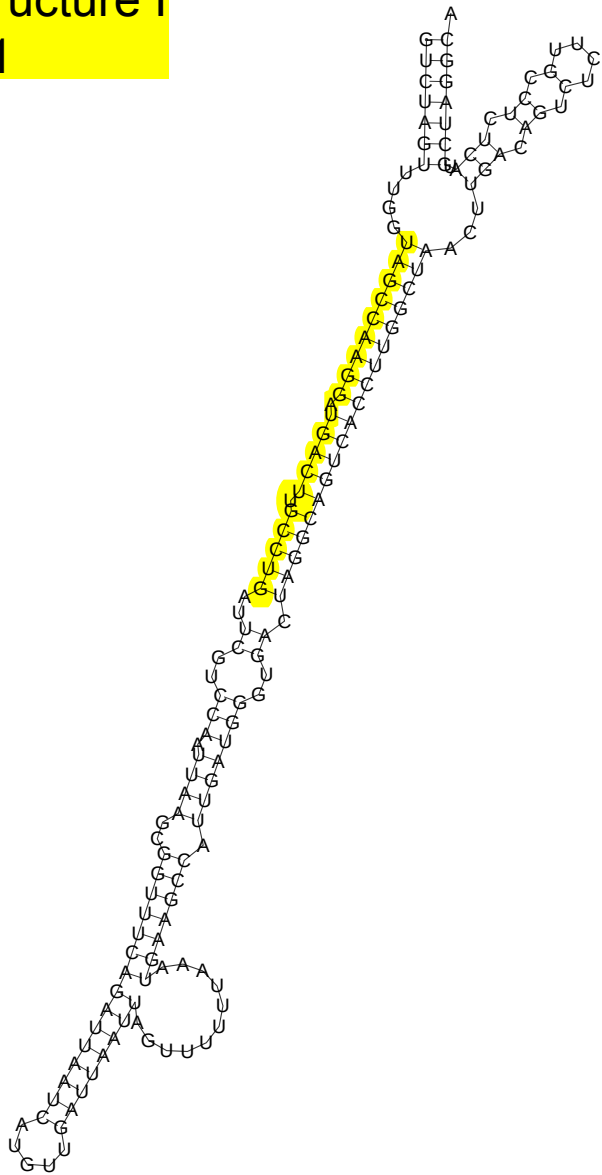
Secondary structure for miR167d.2



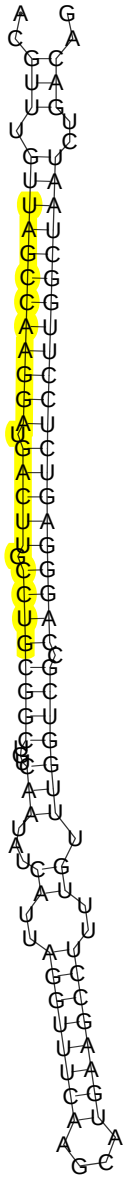
Secondary structure for miR168a



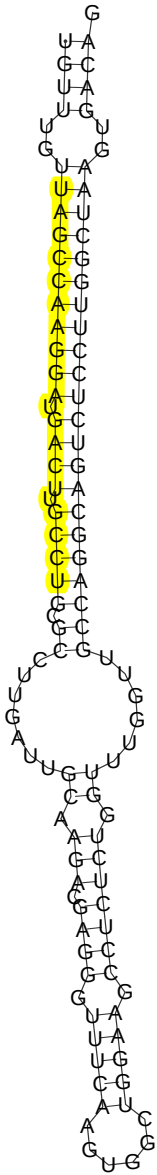
Secondary structure I for miR169b.1



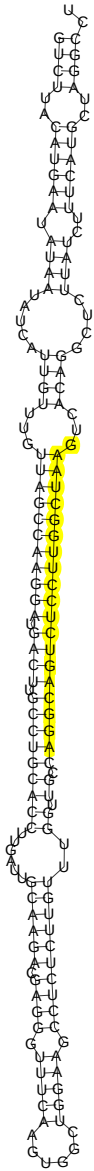
Secondary structure II for miR169b.1



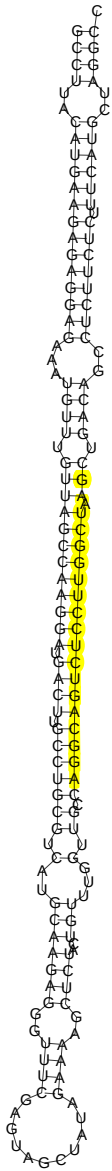
Secondary structure III for miR169b.1



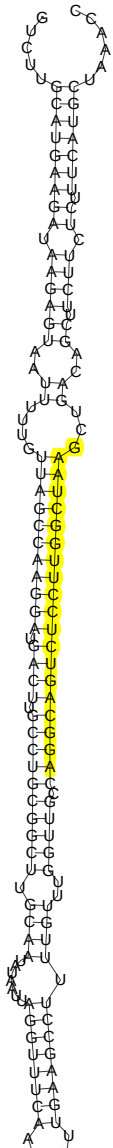
Secondary structure I for miR169b.1-3p



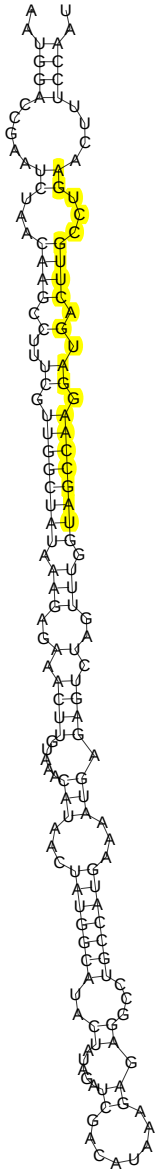
Secondary structure II for miR169b.1-3p



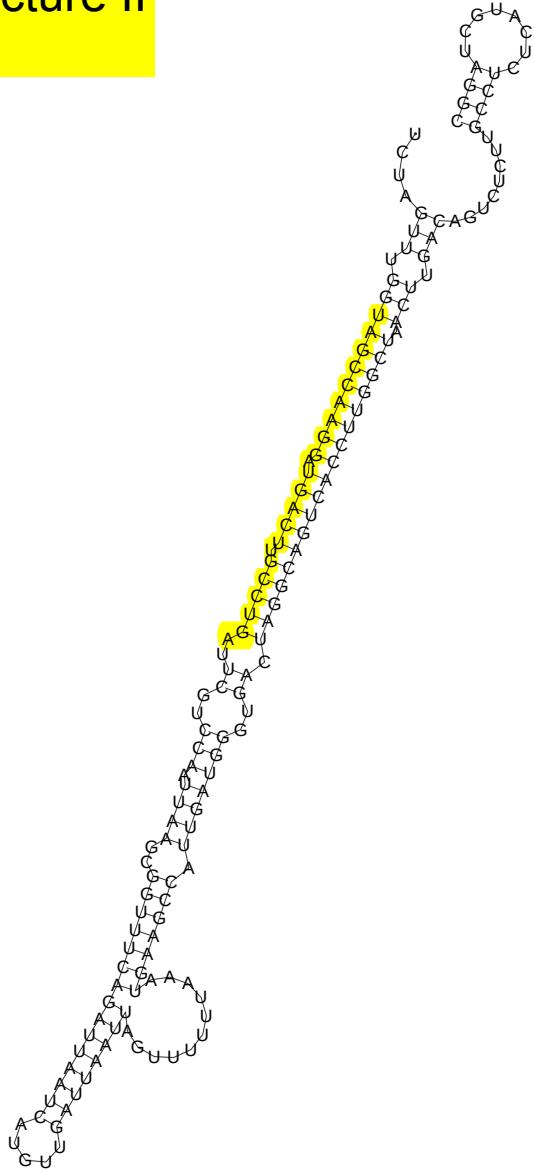
Secondary structure III
for miR169b.1-3p



Secondary structure I for miR169i.1



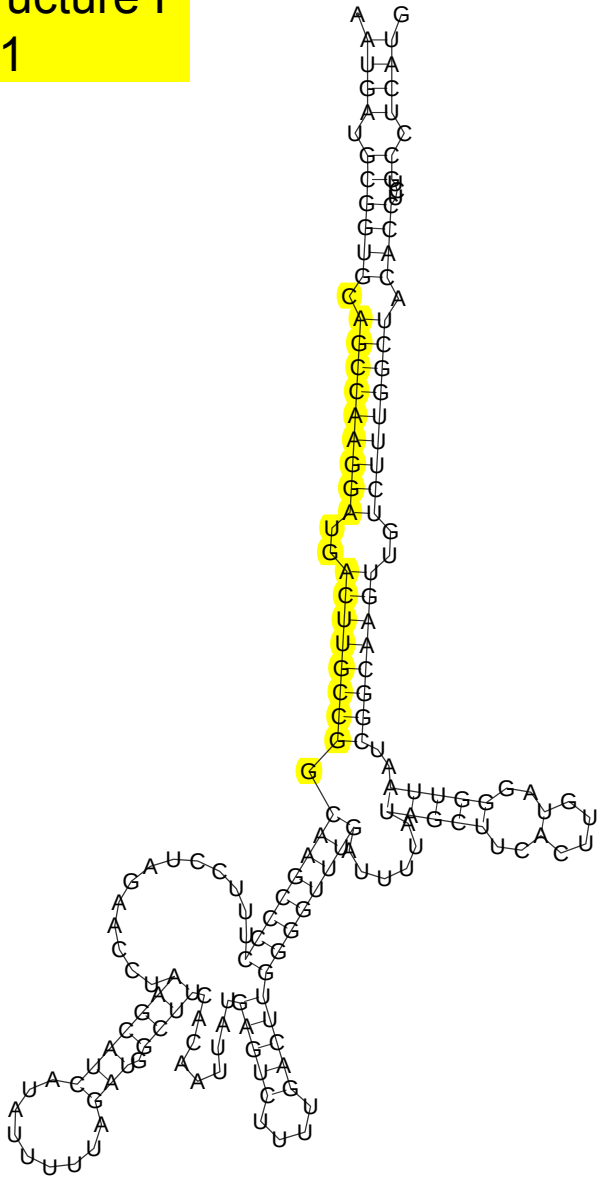
Secondary structure II
for miR169i.1



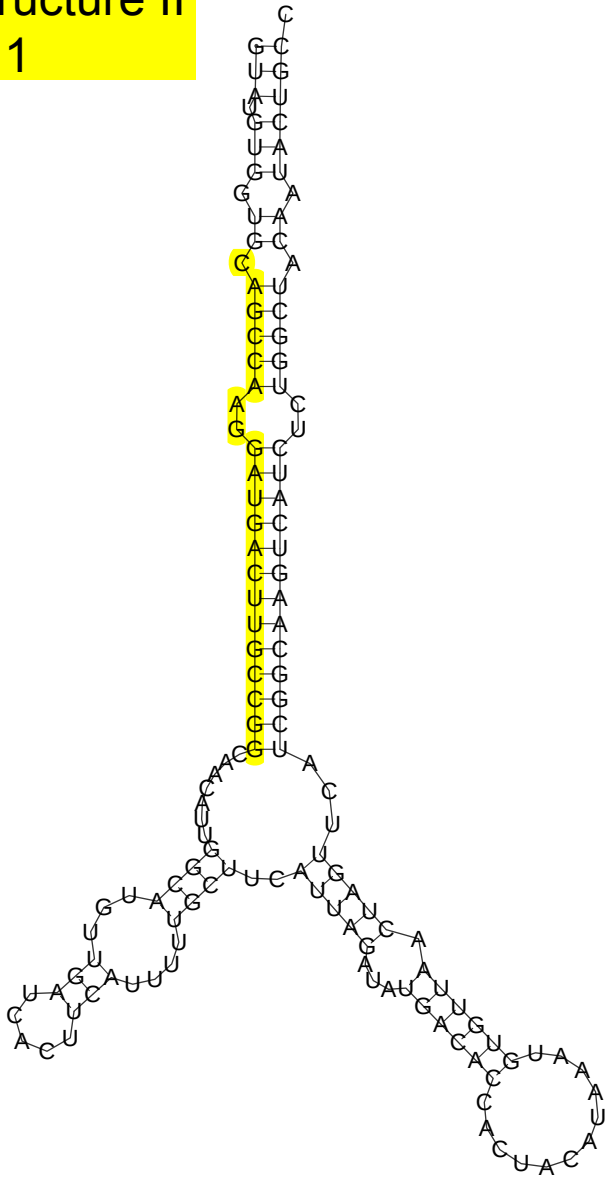
Secondary structure III for miR169i.1

Secondary structure for miR169i.1-3p

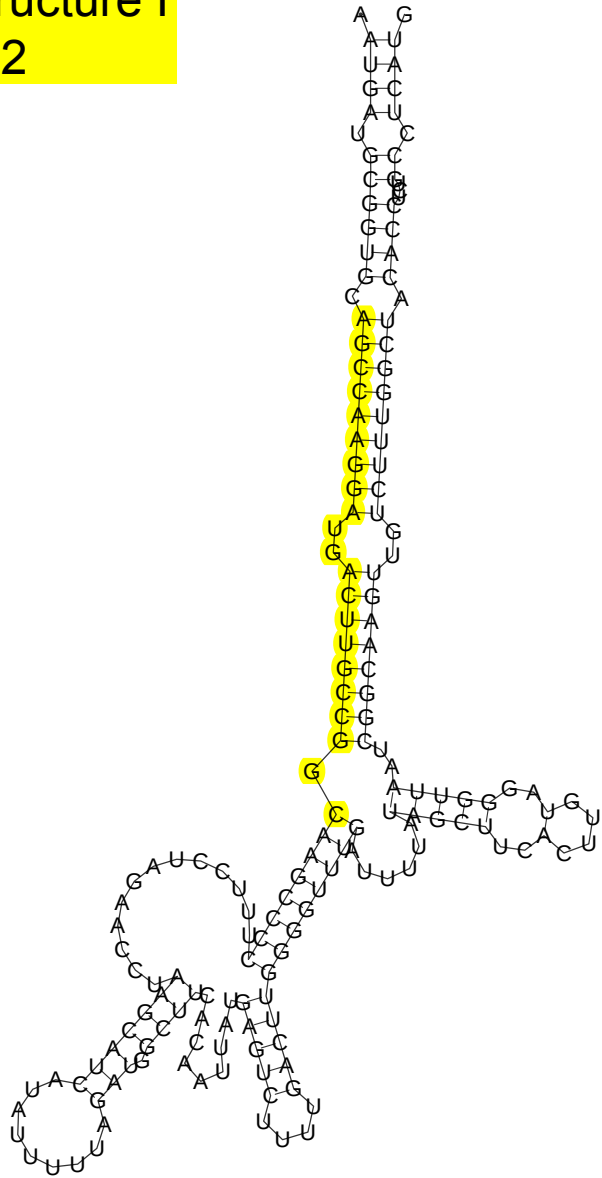
Secondary structure I for miR169m.1



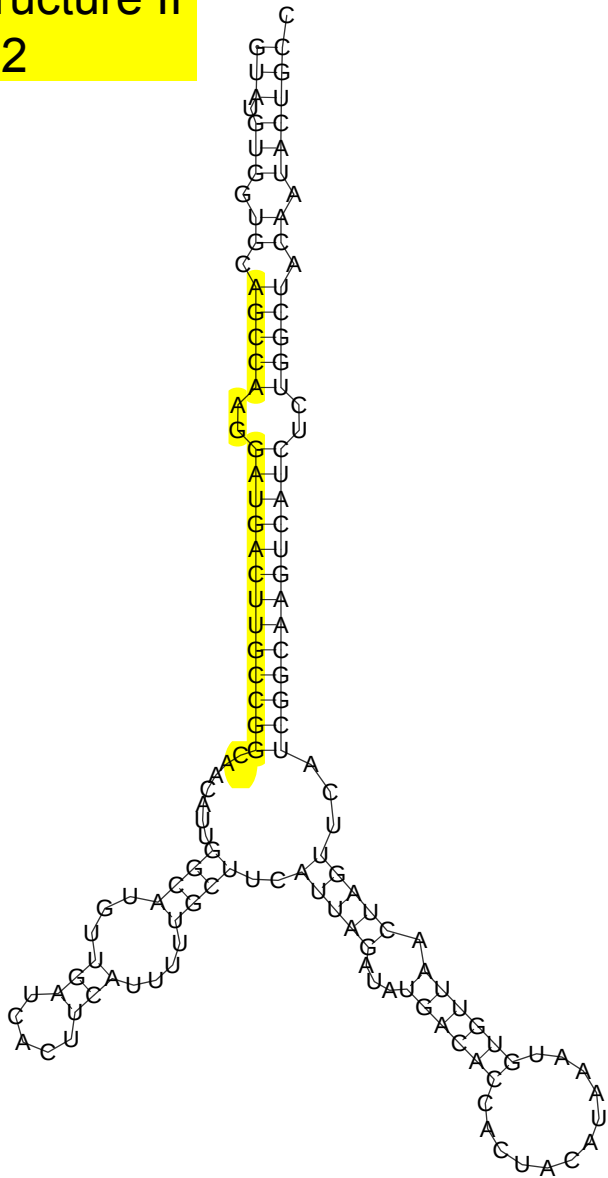
Secondary structure II for miR169m.1



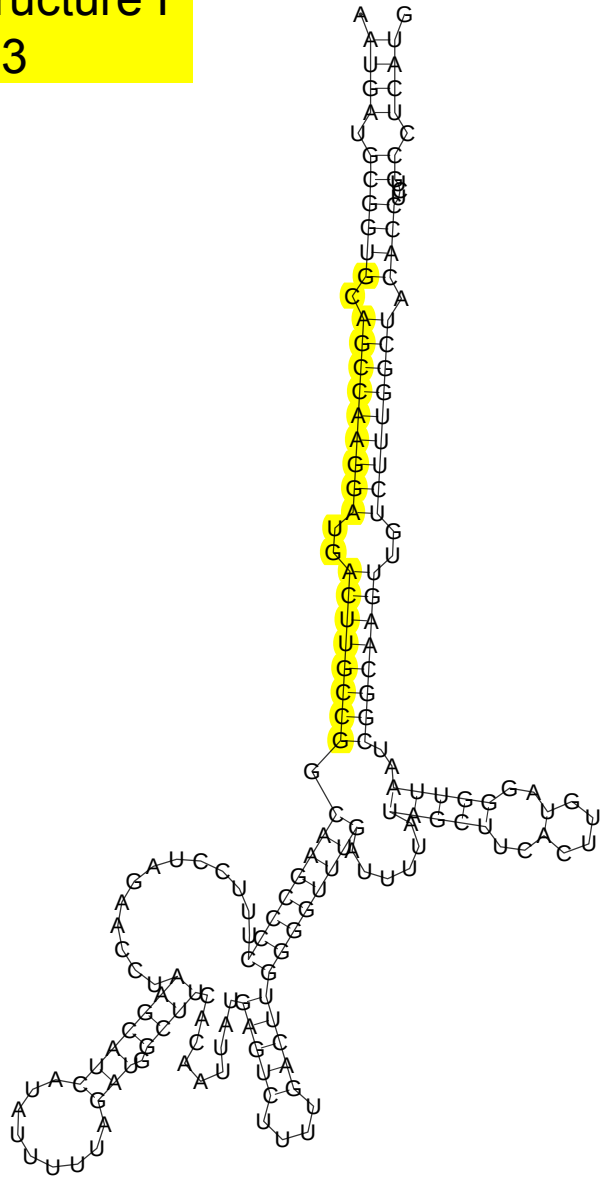
Secondary structure I for miR169m.2



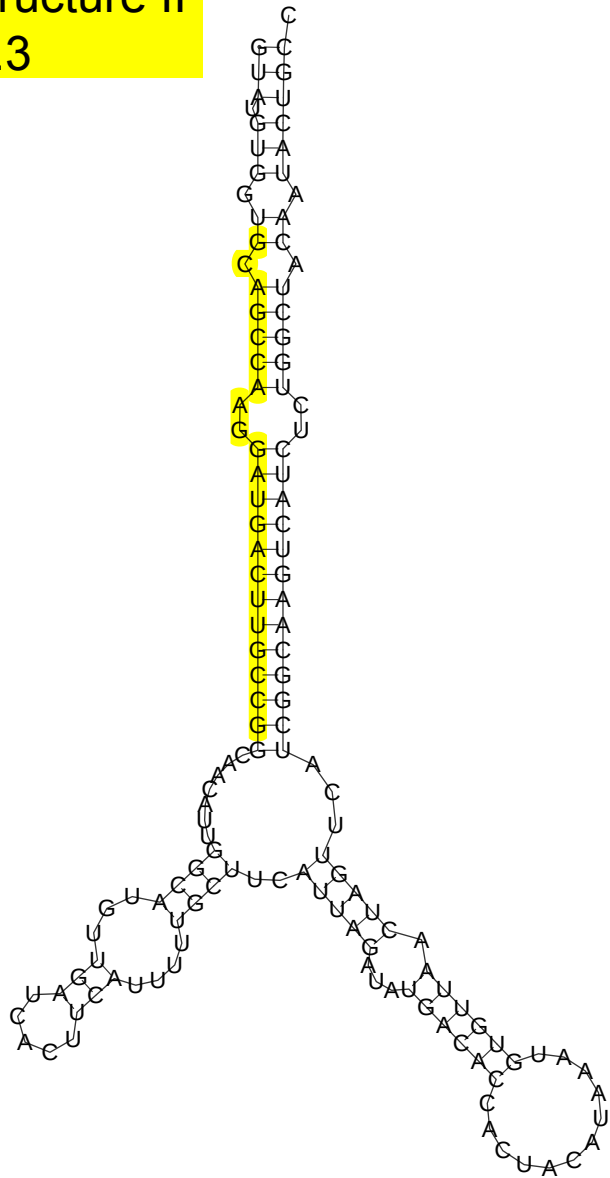
Secondary structure II
for miR169m.2



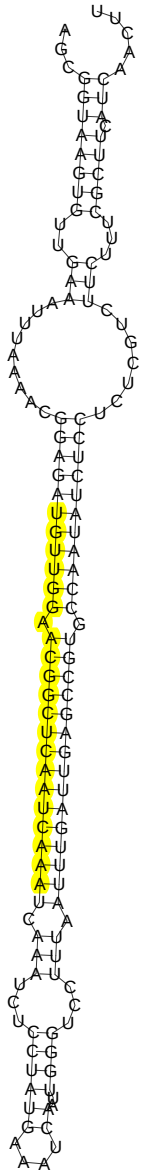
Secondary structure I for miR169m.3



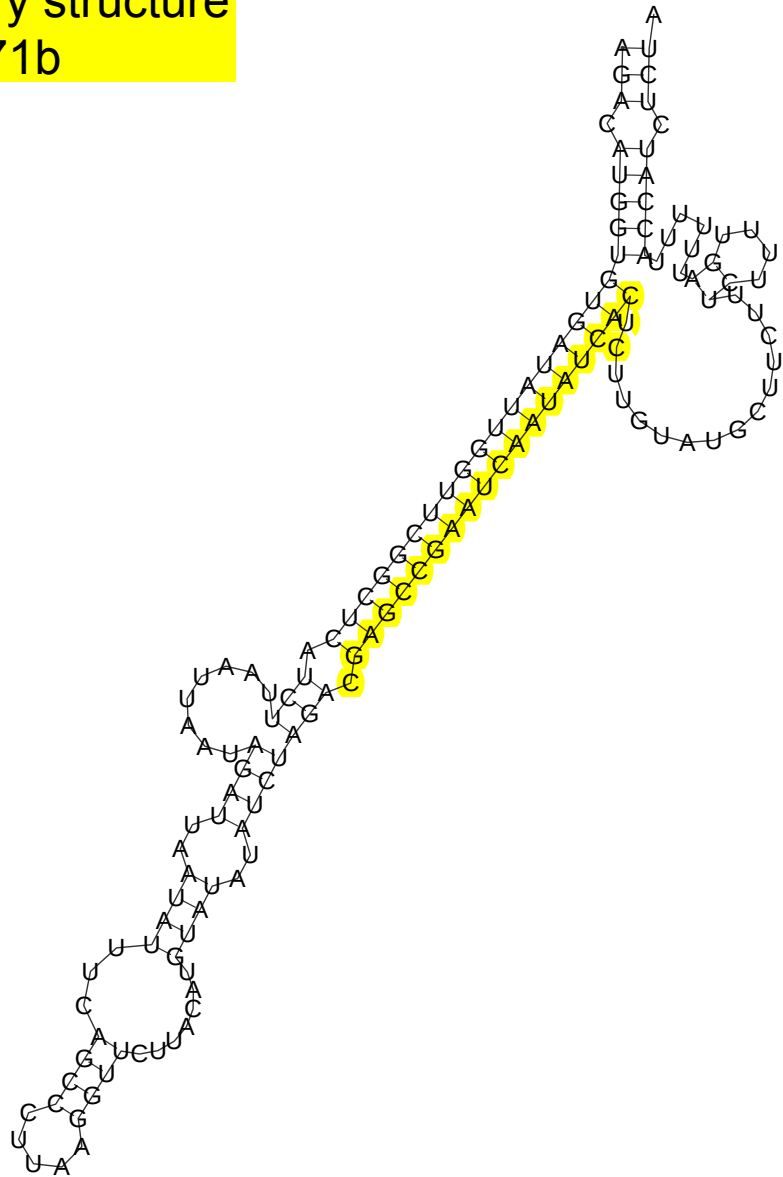
Secondary structure II
for miR169m.3



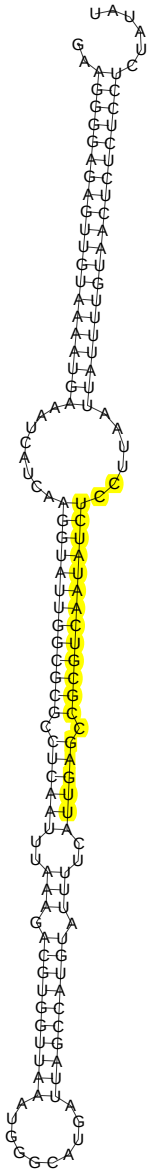
Secondary structure for miR171a.1



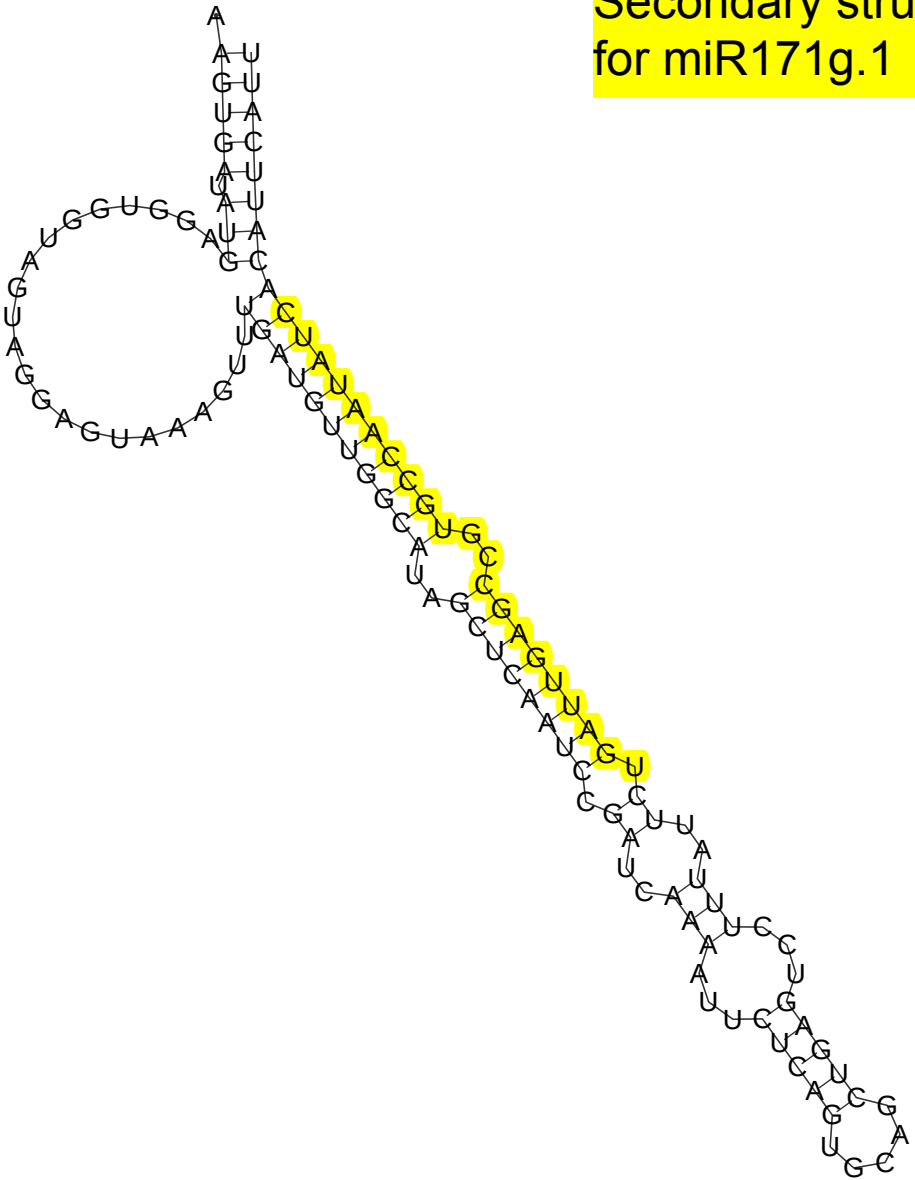
Secondary structure for miR171b



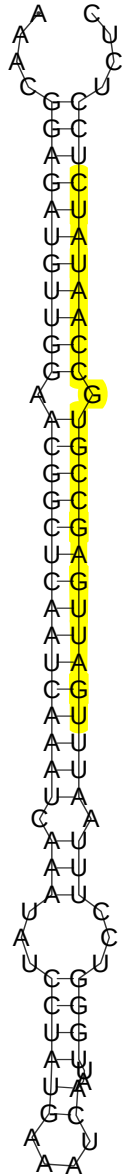
Secondary structure for miR171d



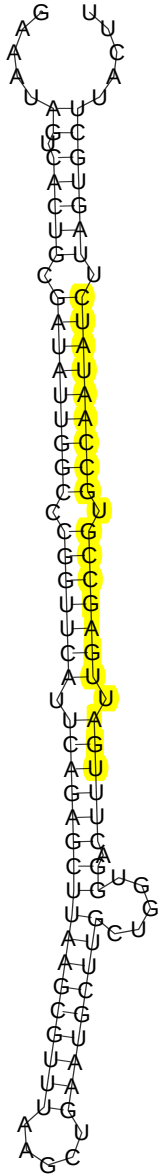
Secondary structure I for miR171g.1



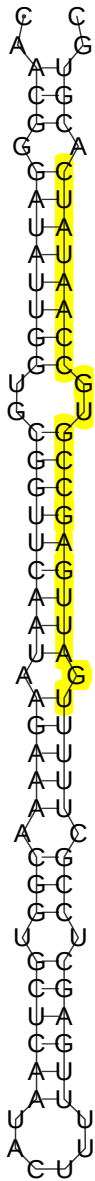
Secondary structure II for miR171g.1



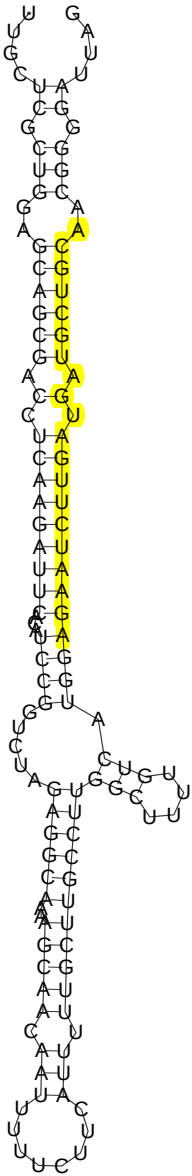
Secondary structure III
for miR171g.1



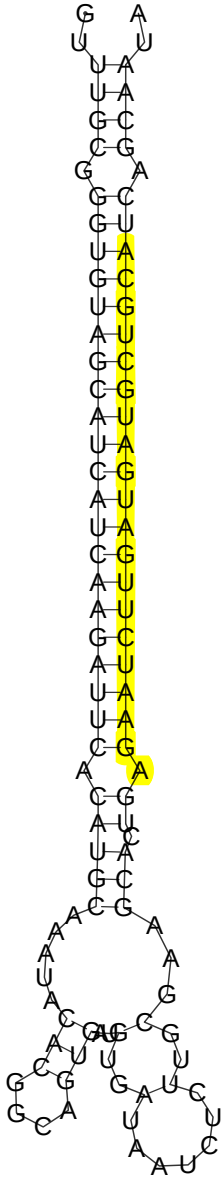
Secondary structure IV
for miR171g.1



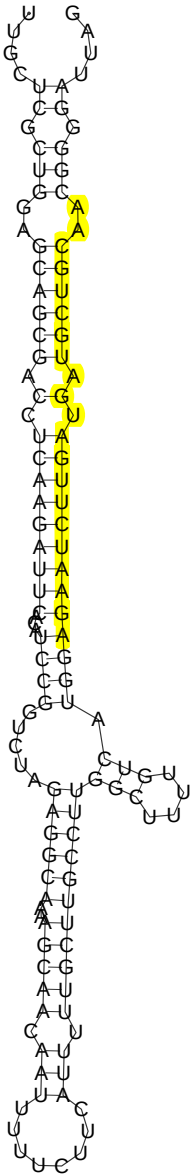
Secondary structure I
for miR172a-3p.1



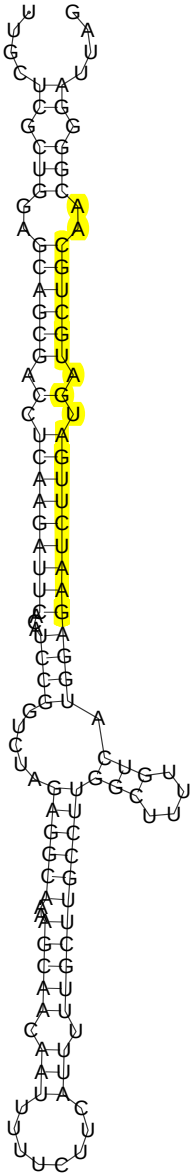
Secondary structure II for miR172a-3p.1



Secondary structure for miR172a-3p.2



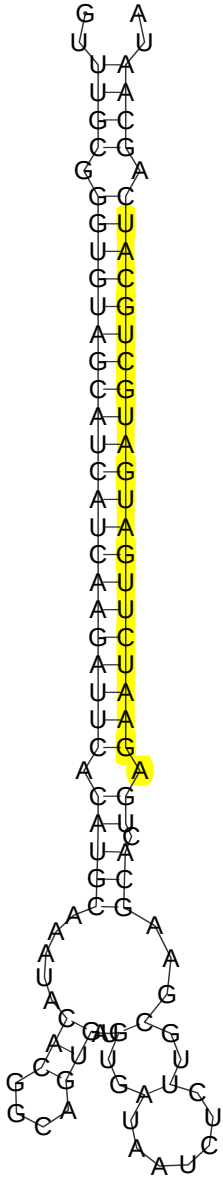
Secondary structure for miR172a-3p.3



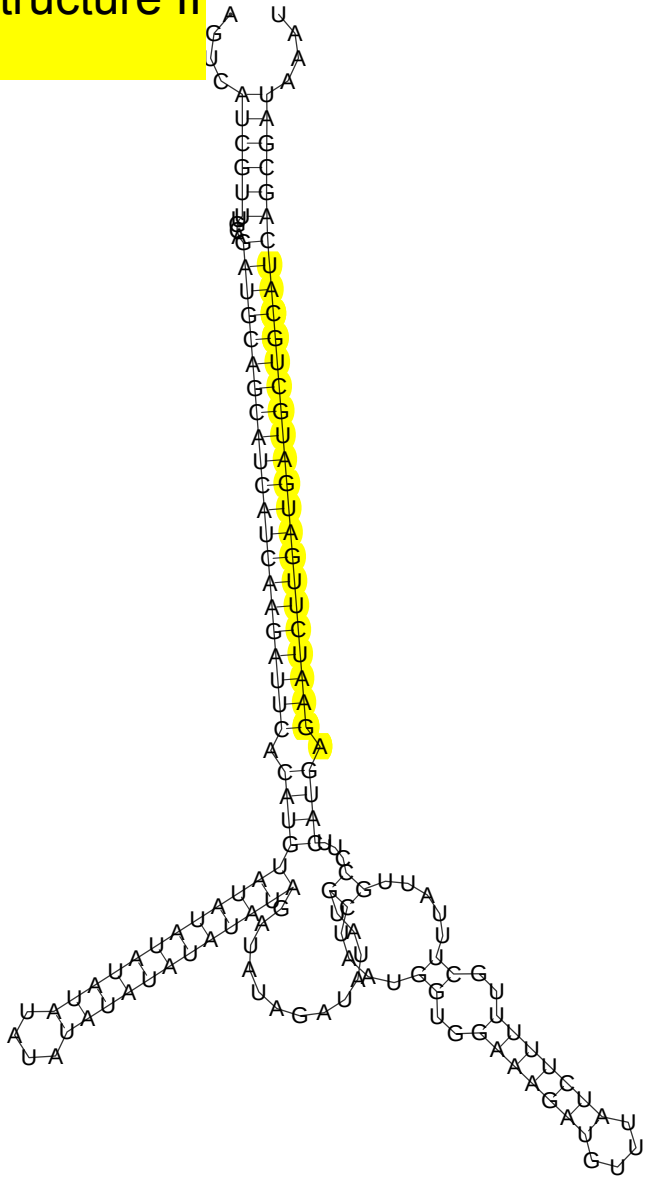
Secondary structure for miR172c.1

Secondary structure for miR172c.2

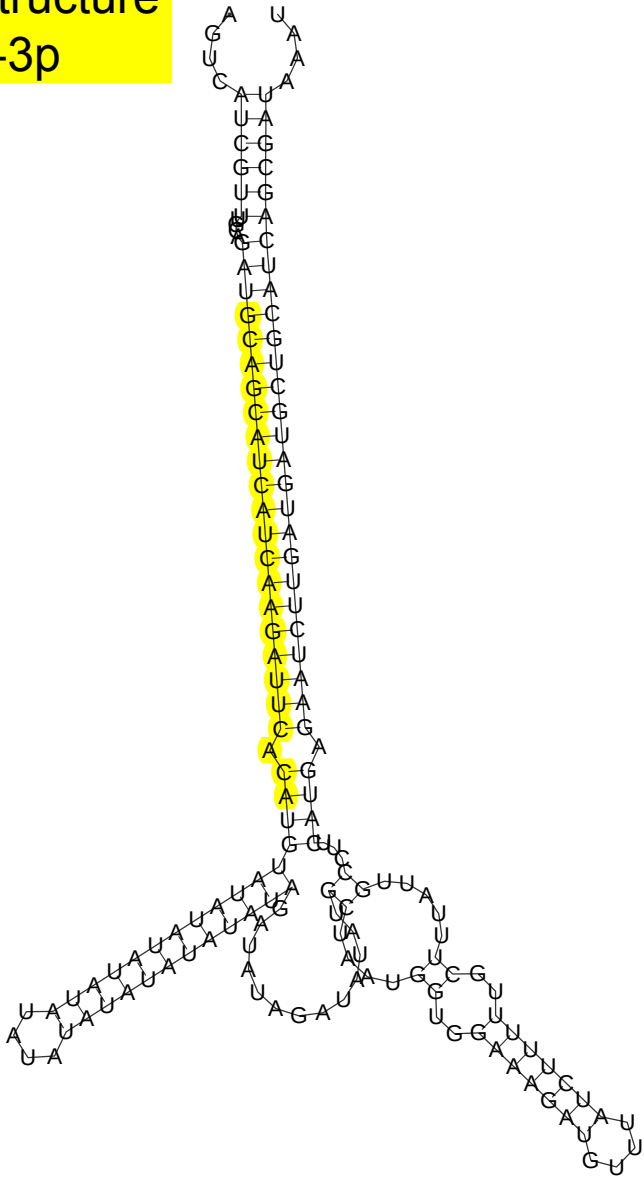
Secondary structure I for miR172d



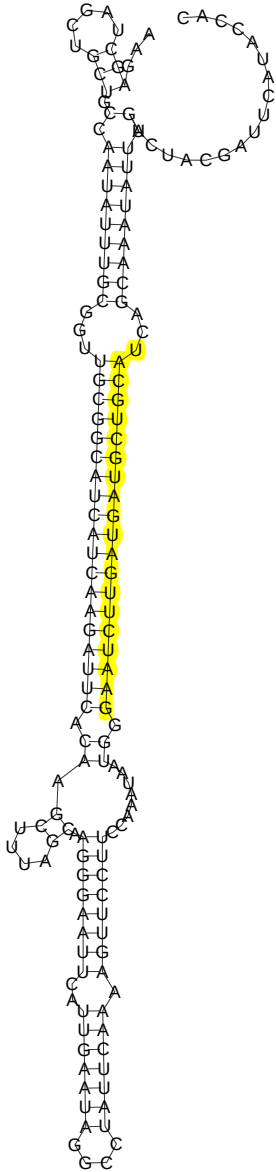
Secondary structure II for miR172d



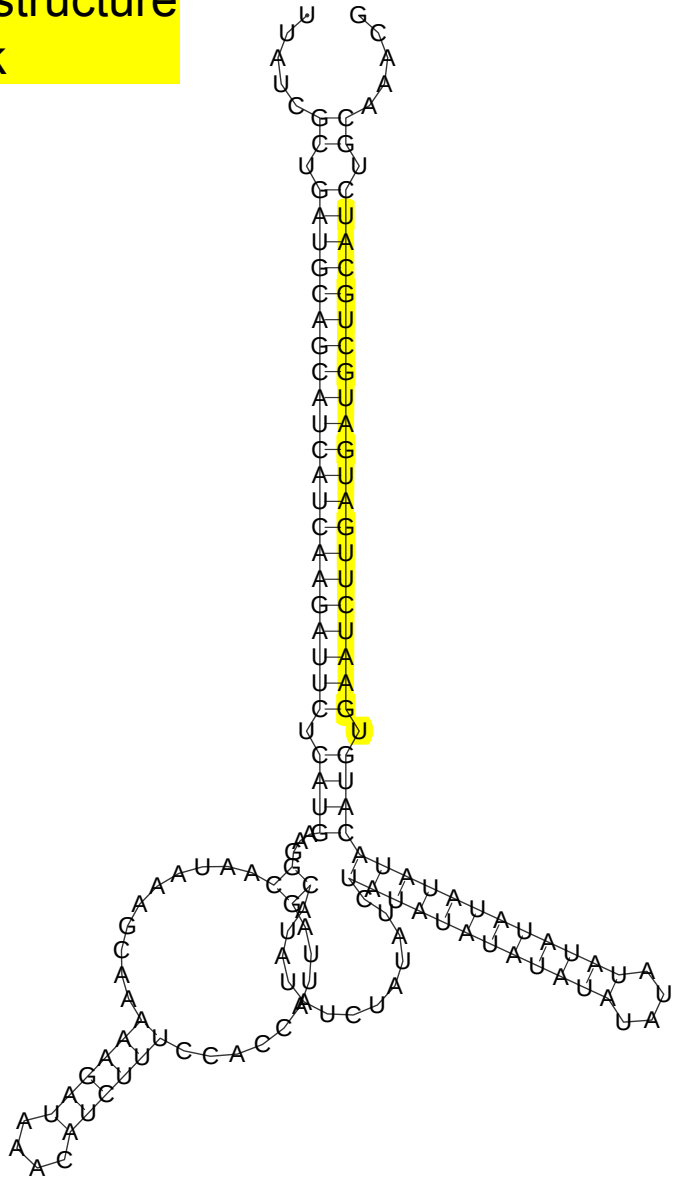
Secondary structure for miR172d-3p



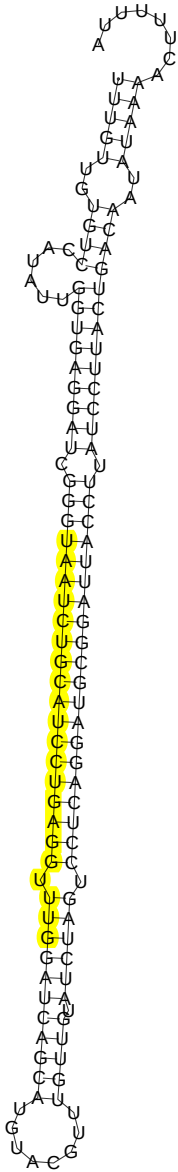
Secondary structure for miR172e.2



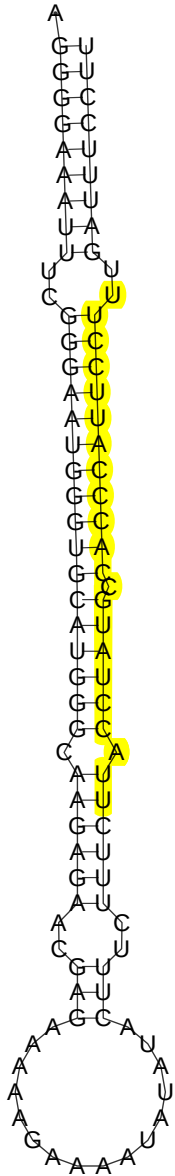
Secondary structure for miR172k



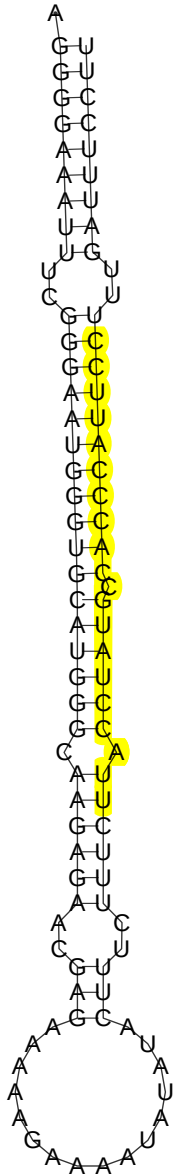
Secondary structure for miR2111



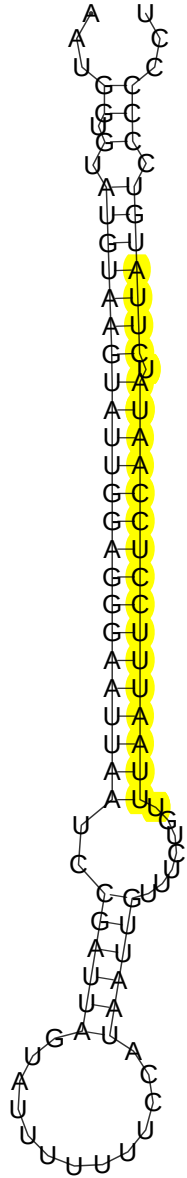
Secondary structure for miR2118.1



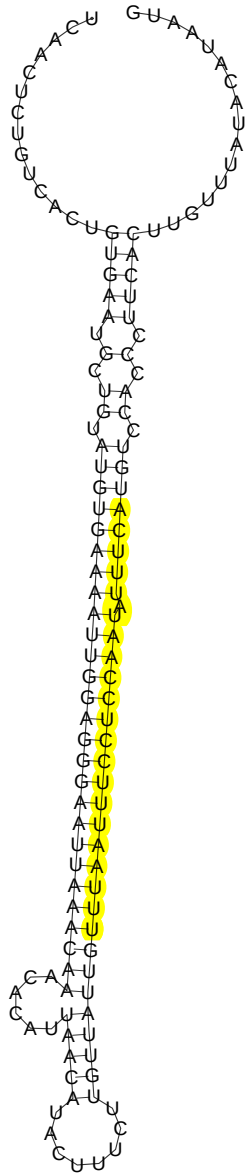
Secondary structure for miR2118.2



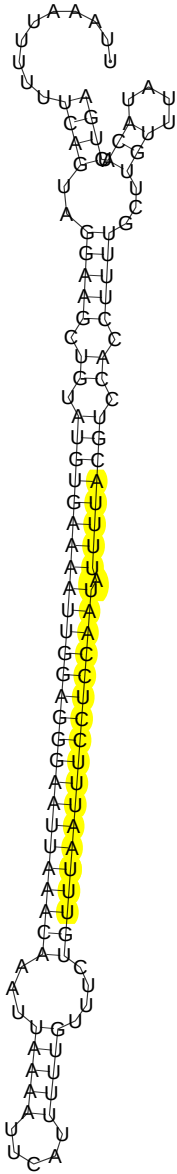
Secondary structure for miR2275a



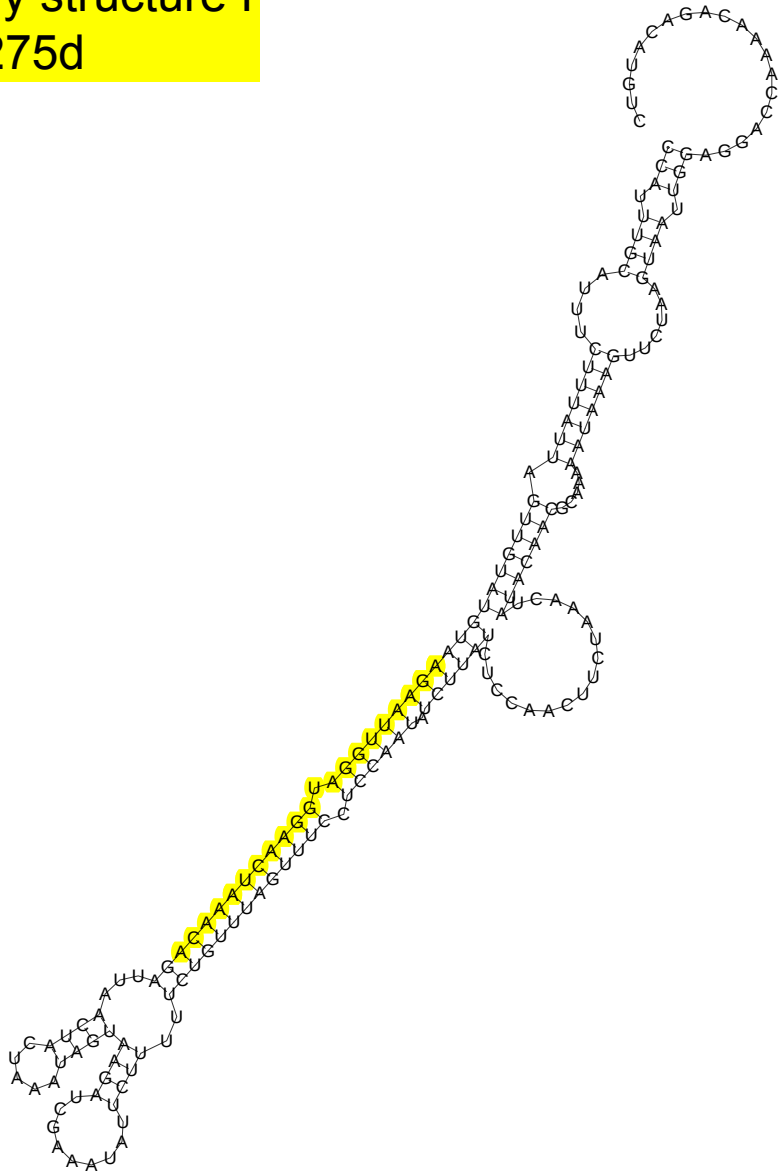
Secondary structure for miR2275b



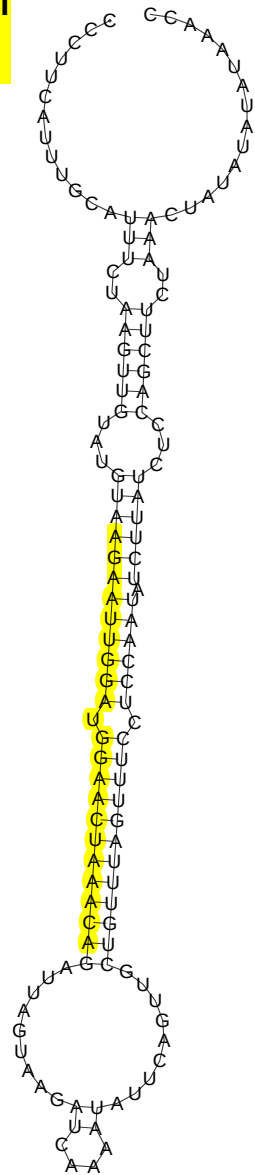
Secondary structure for miR2275c.1



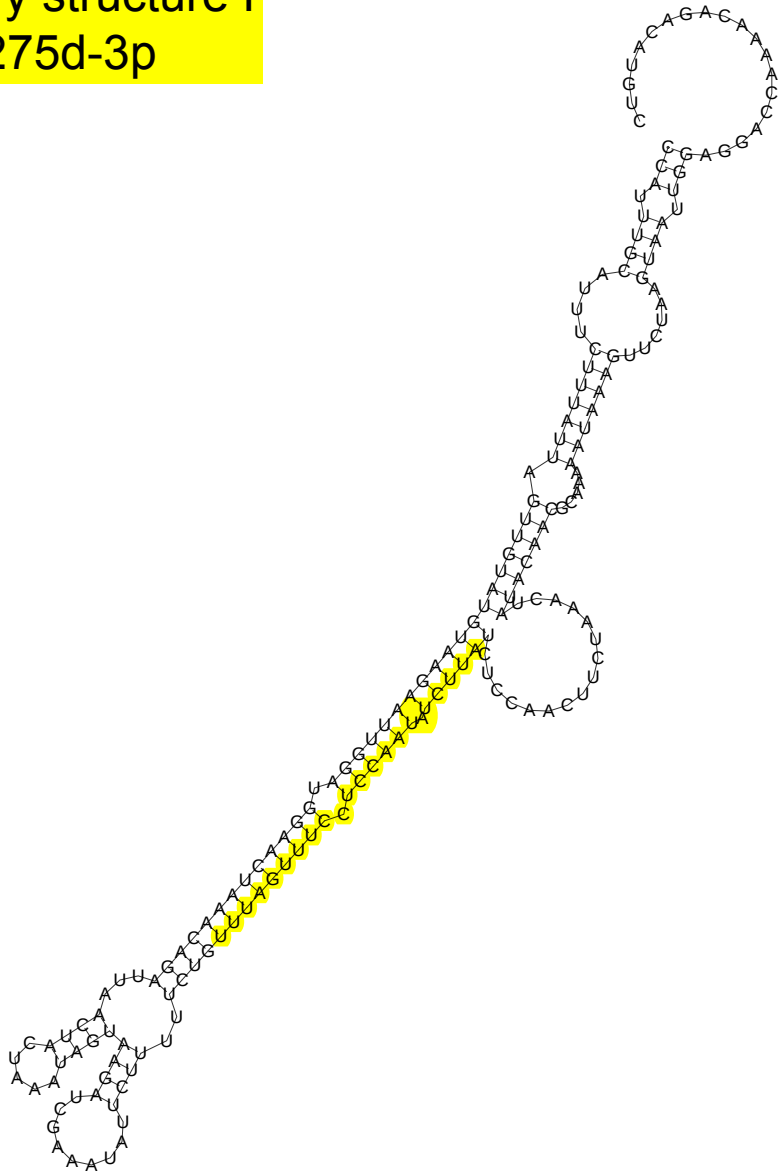
Secondary structure I
for miR2275d



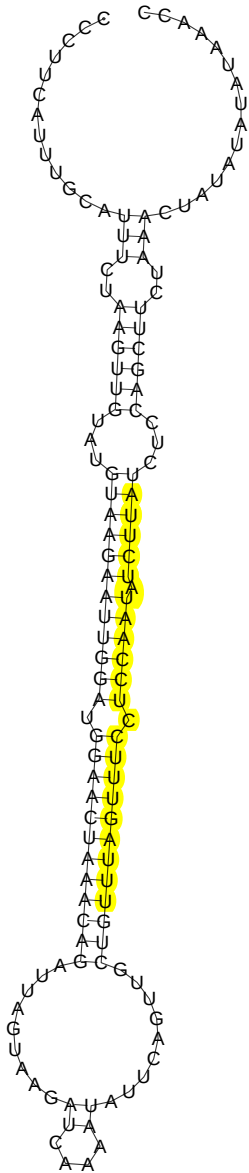
Secondary structure II for miR2275d



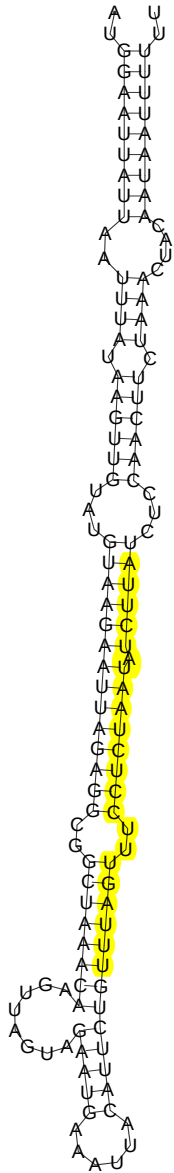
Secondary structure I
for miR2275d-3p



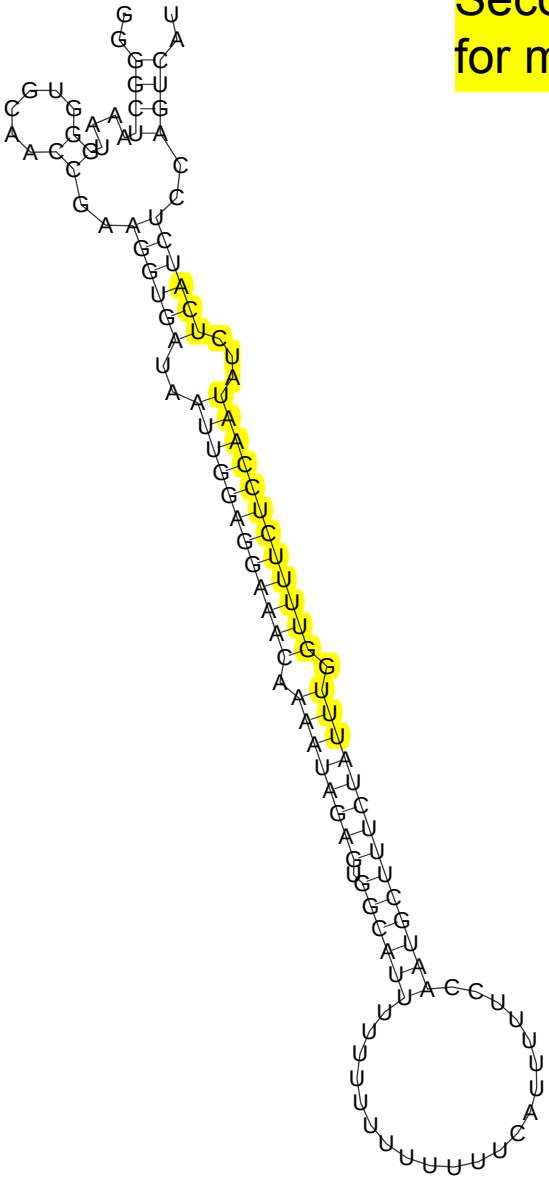
Secondary structure I for miR2275d-3p



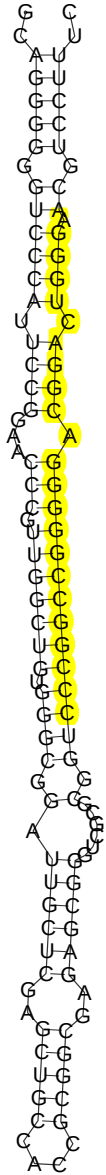
Secondary structure for miR2275e



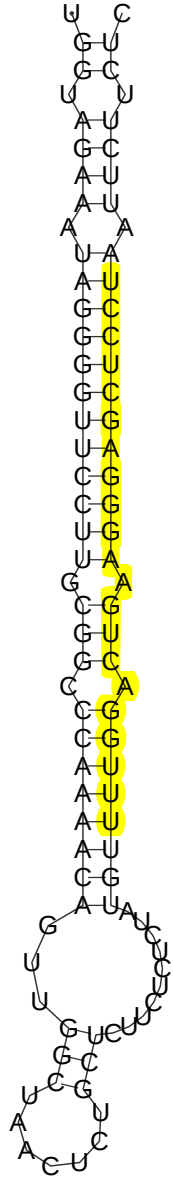
Secondary structure for miR2275f



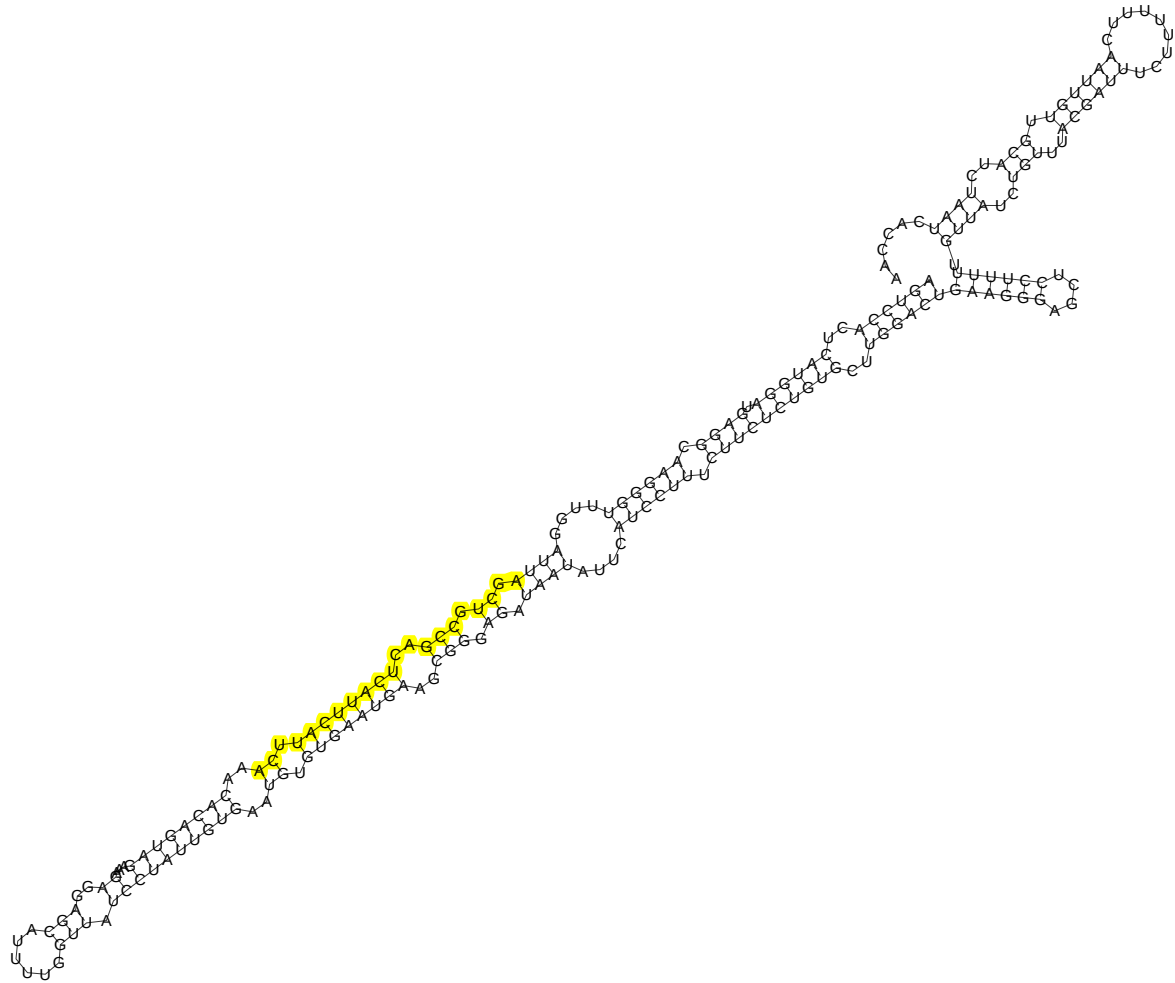
Secondary structure for miR2911



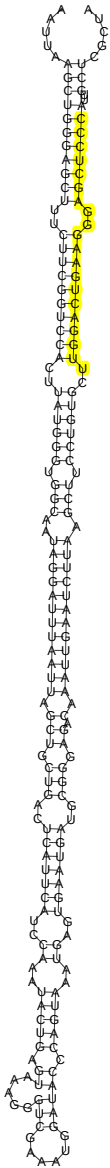
Secondary structure for miR319



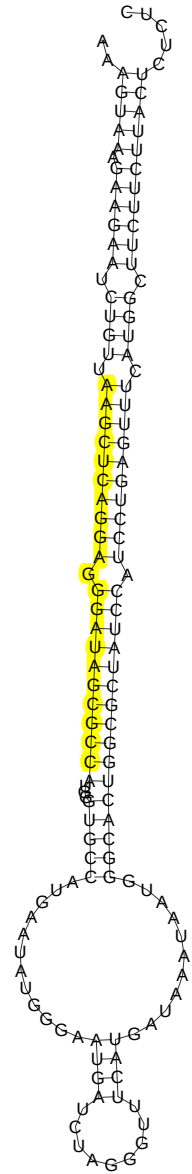
Secondary structure for miR319a



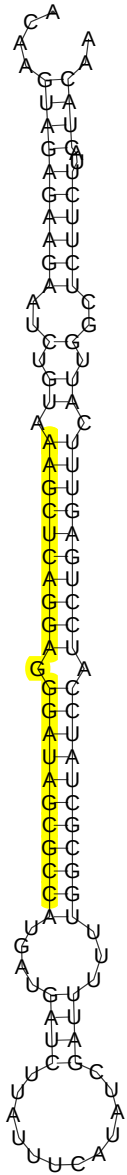
Secondary structure for miR319b



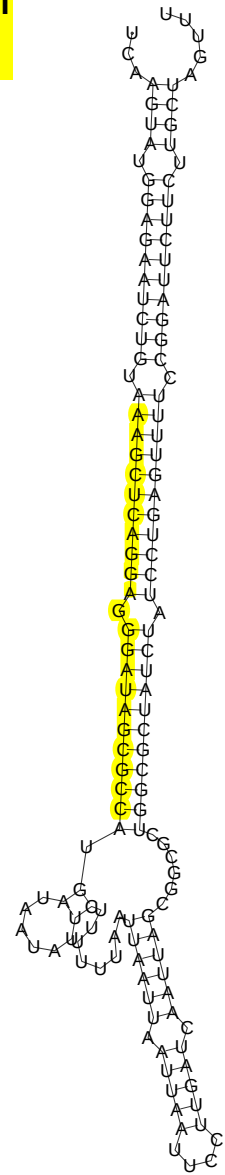
Secondary structure I for miR390.1



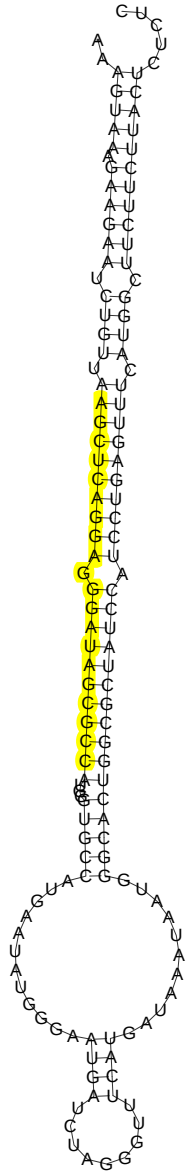
Secondary structure II for miR390.1



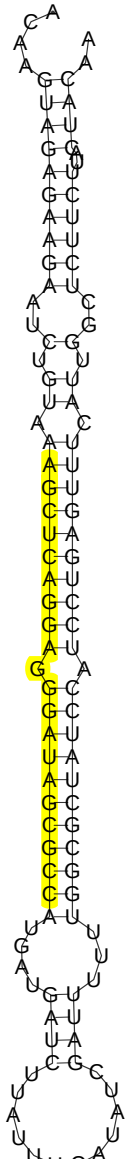
Secondary structure III for miR390.1



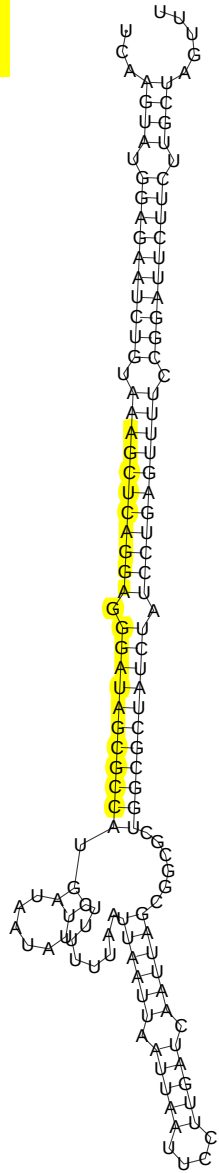
Secondary structure I for miR390.2



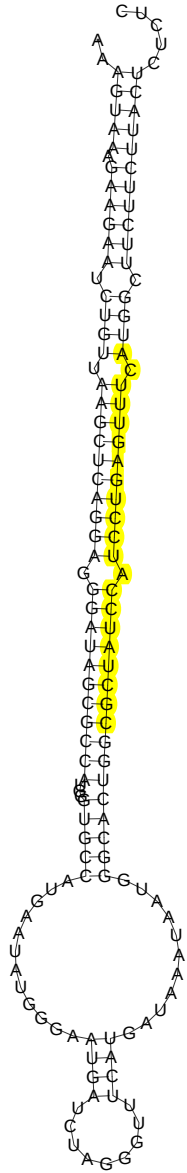
Secondary structure II for miR390.2



Secondary structure III for miR390.2

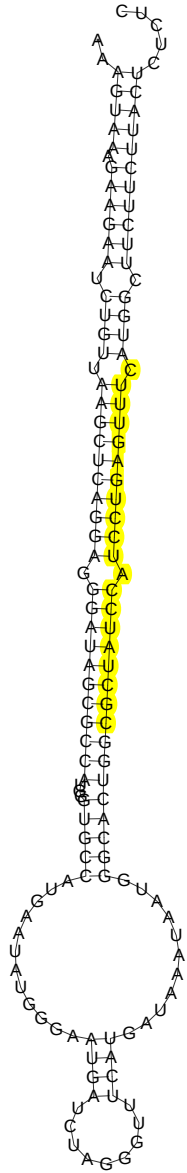


Secondary structure I for miR390-3p.1



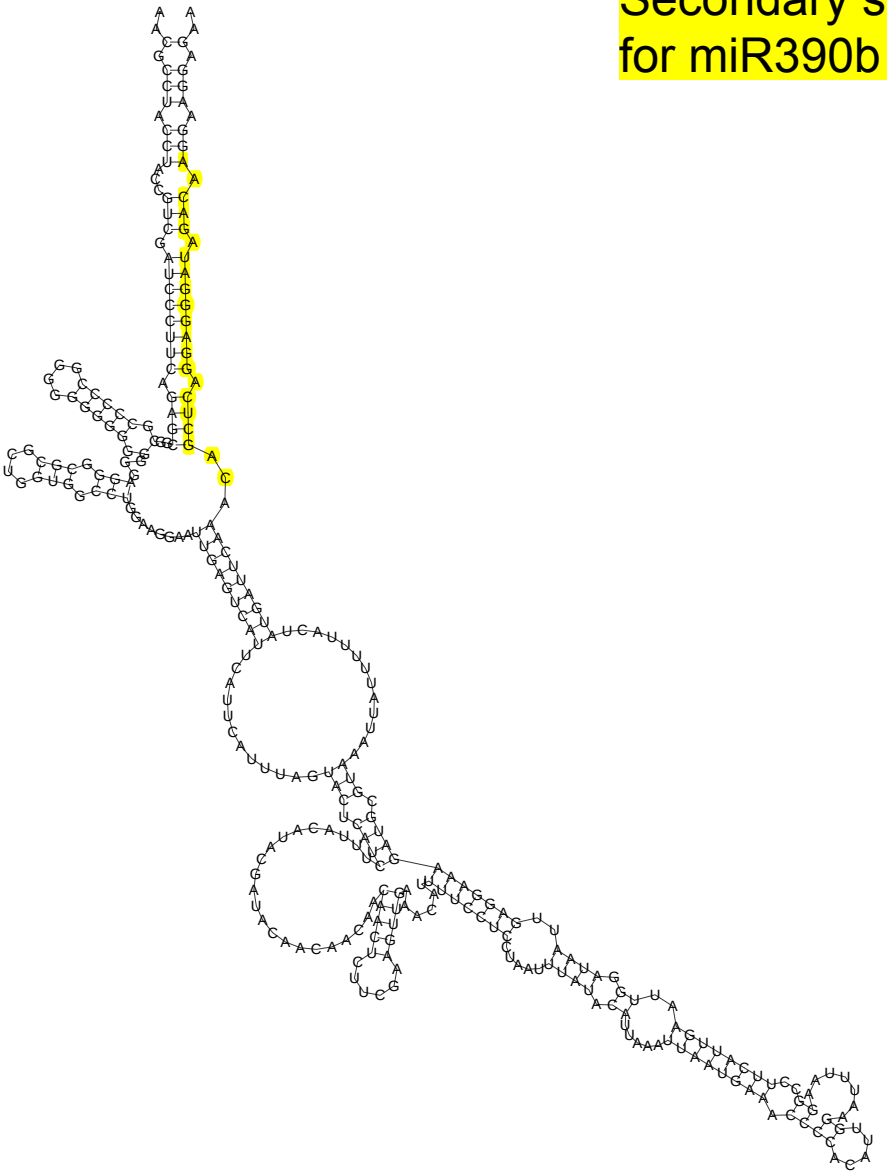
Secondary structure II for miR390-3p.1

Secondary structure I for miR390-3p.2

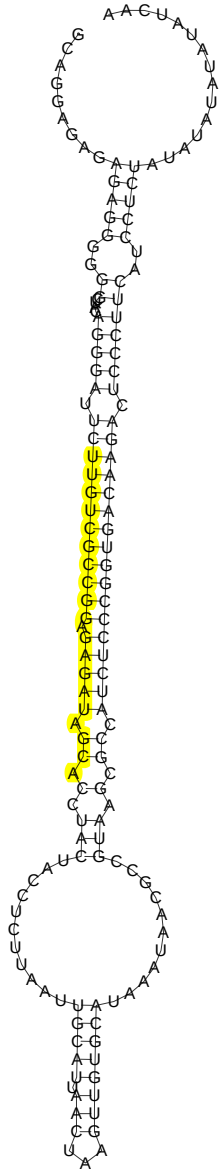


Secondary structure II for miR390-3p.2

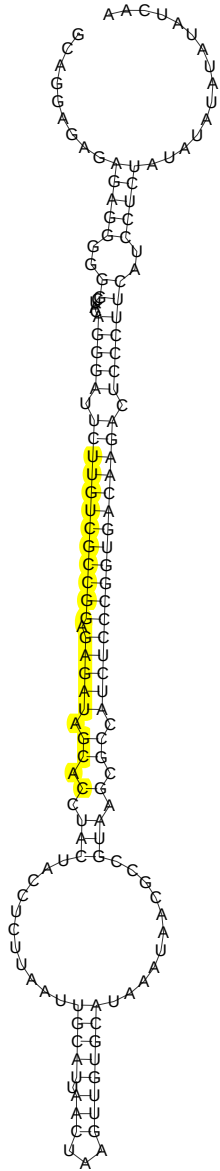
Secondary structure for miR390b



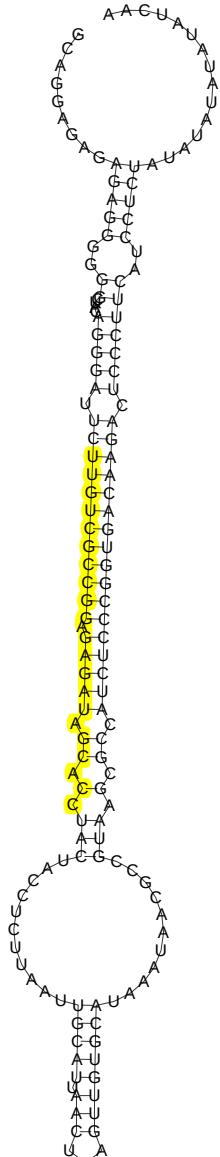
Secondary structure for miR391a.1



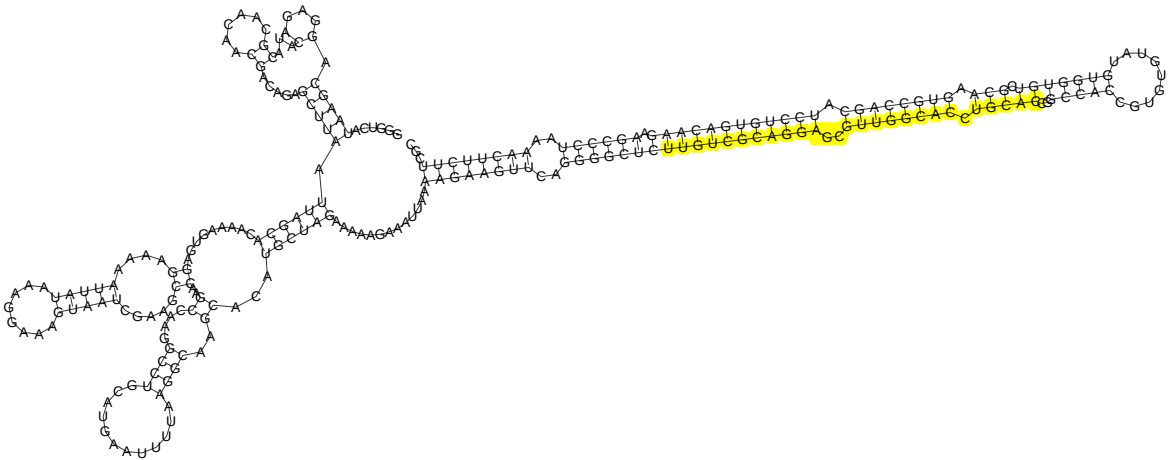
Secondary structure for miR391a.2



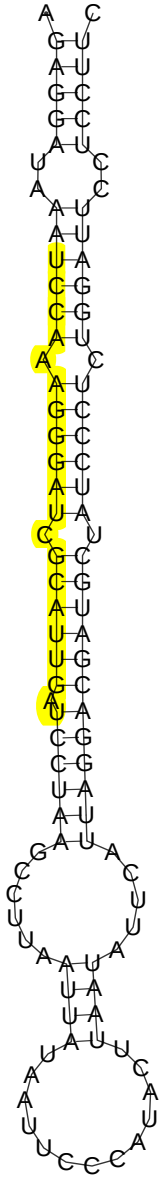
Secondary structure for miR391a.3



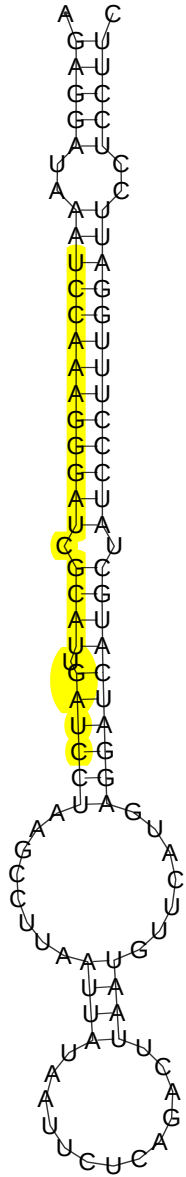
Secondary structure for miR391b



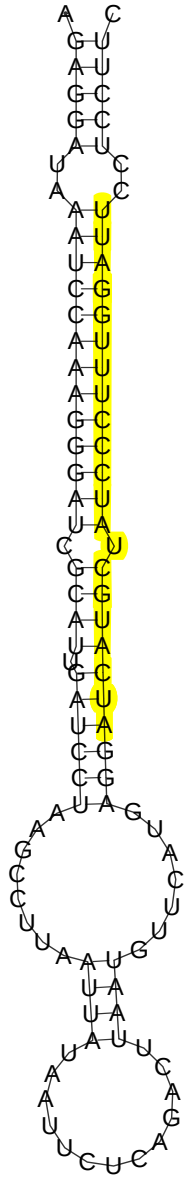
Secondary structure for miR393a.1



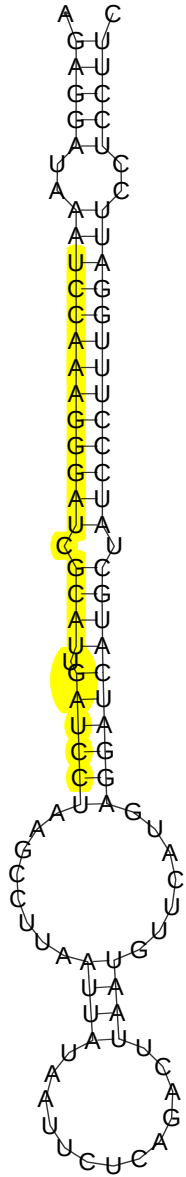
Secondary structure for miR393a.2



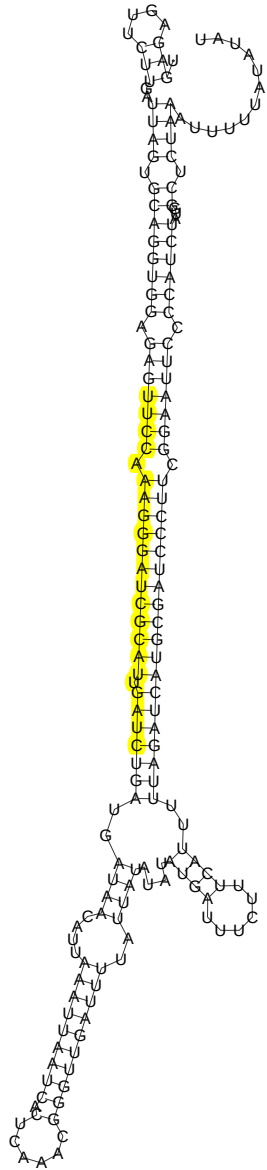
Secondary structure for miR393a.2-3p



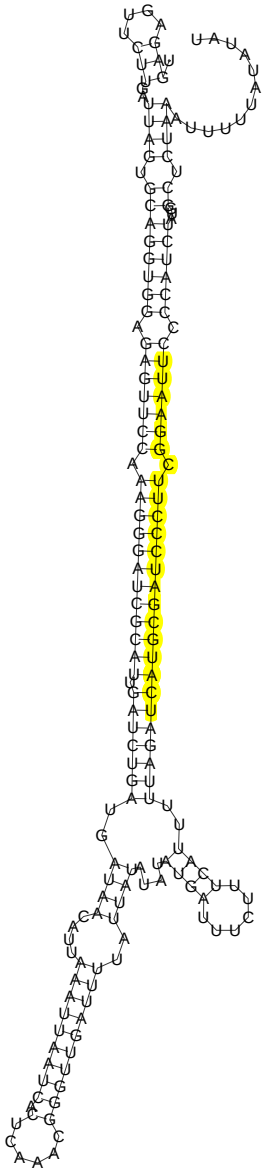
Secondary structure for miR393a.3



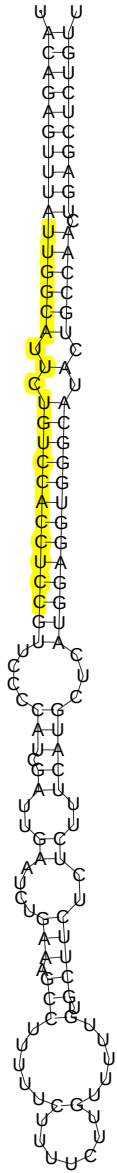
Secondary structure for miR393b



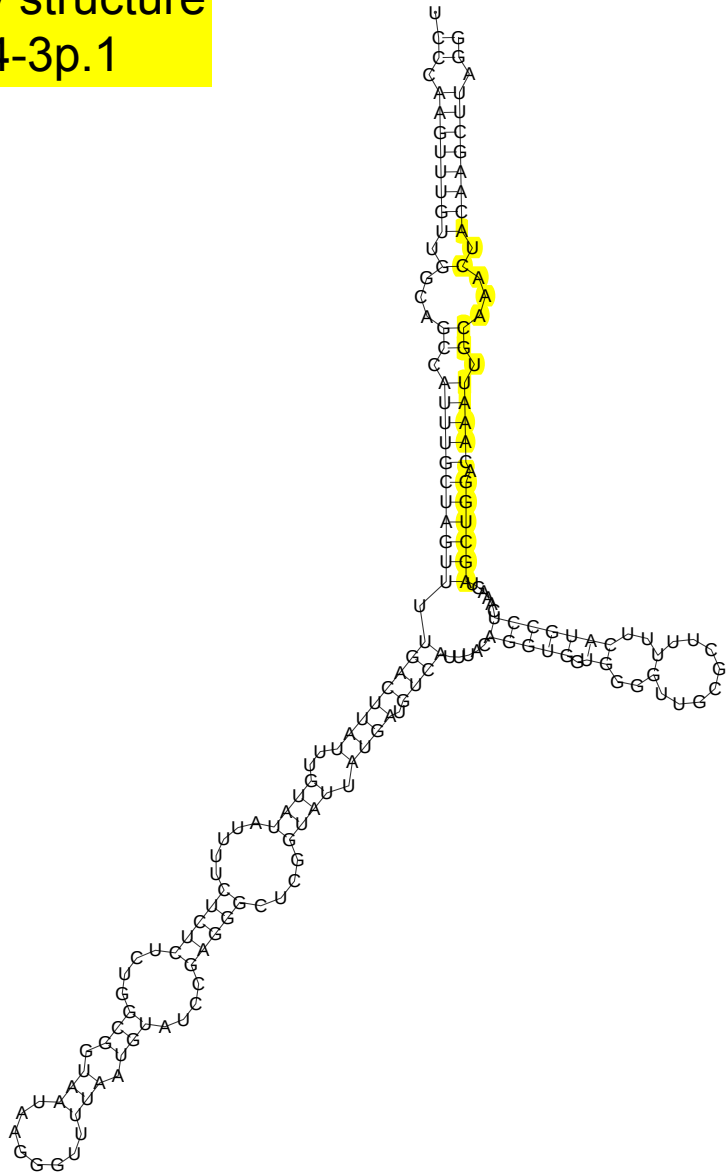
Secondary structure for miR393b-3p



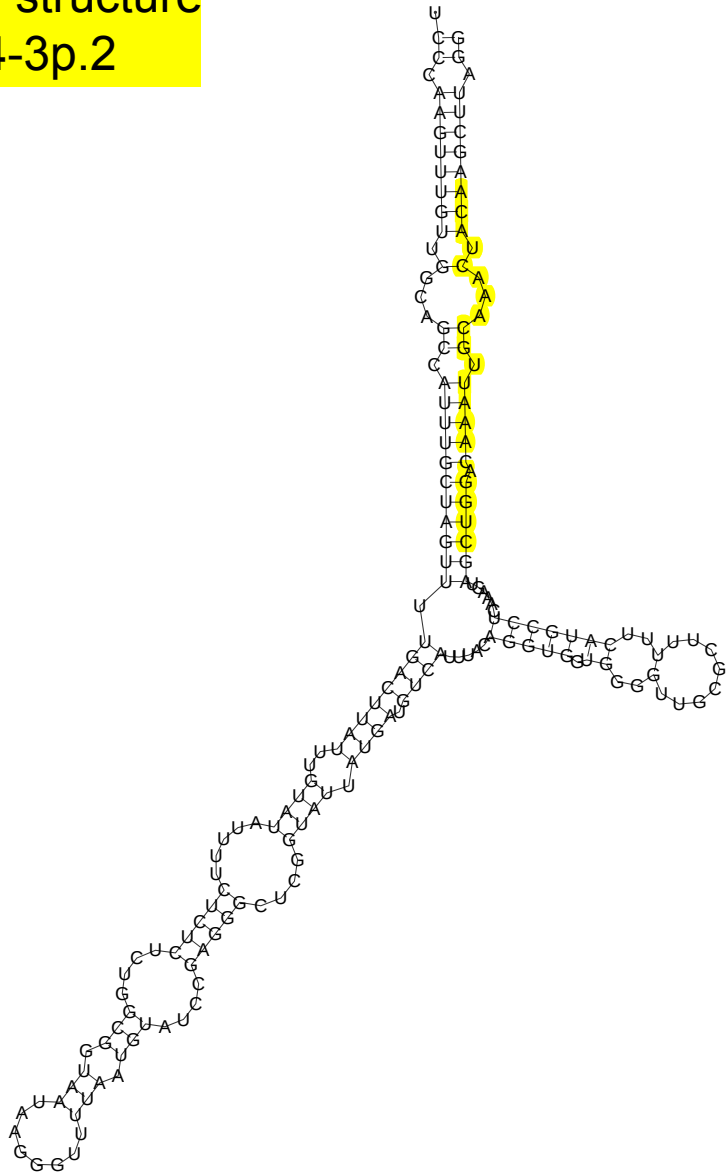
Secondary structure for miR394



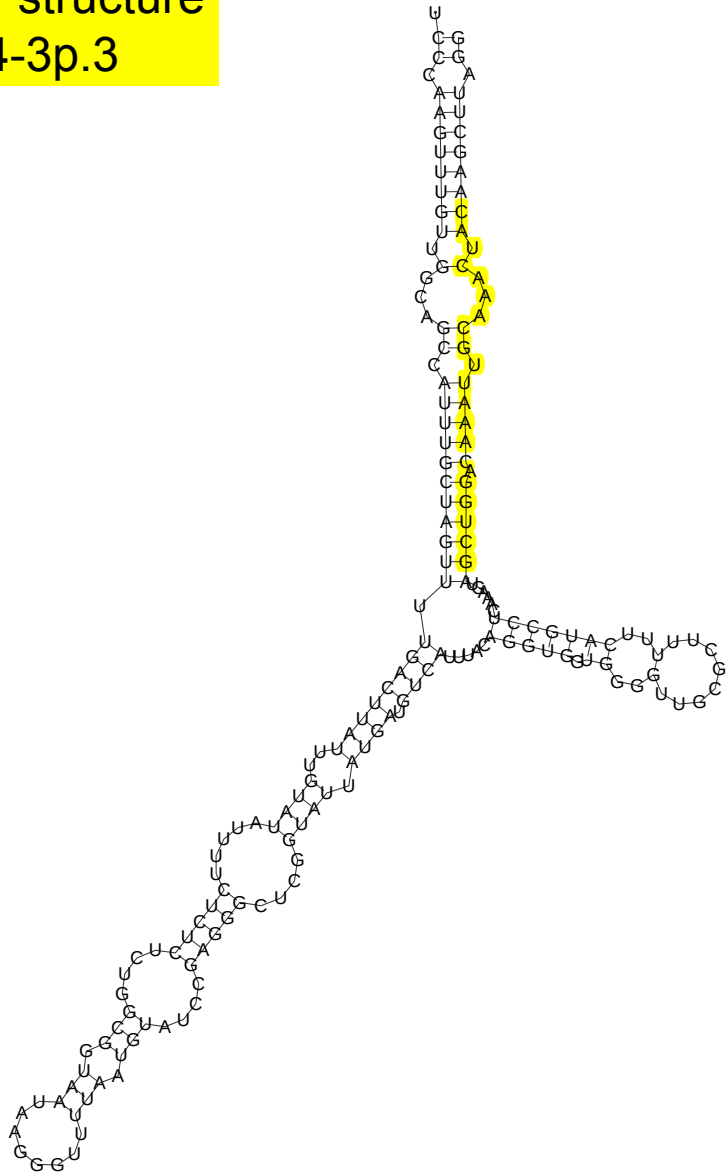
Secondary structure for miR394-3p.1



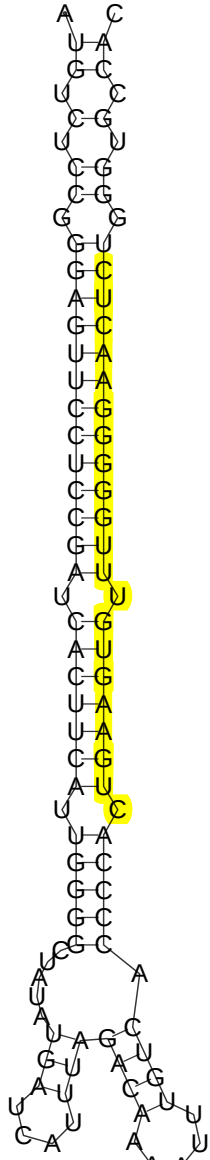
Secondary structure for miR394-3p.2



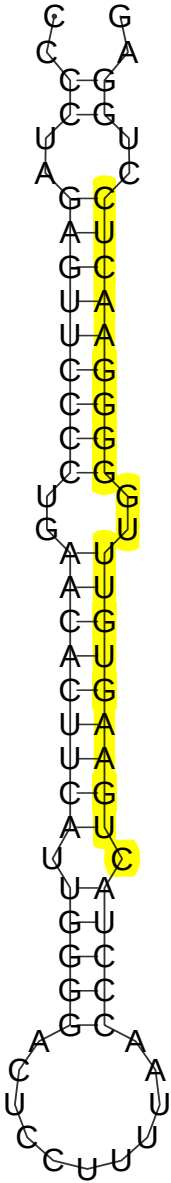
Secondary structure for miR394-3p.3



Secondary structure I for miR395.1

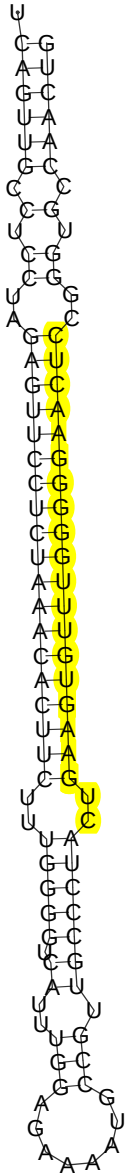


Secondary structure II for miR395.1

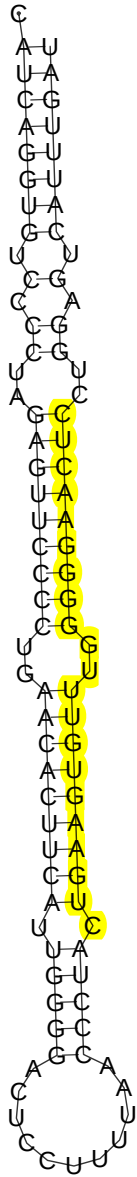


Secondary structure III for miR395.1

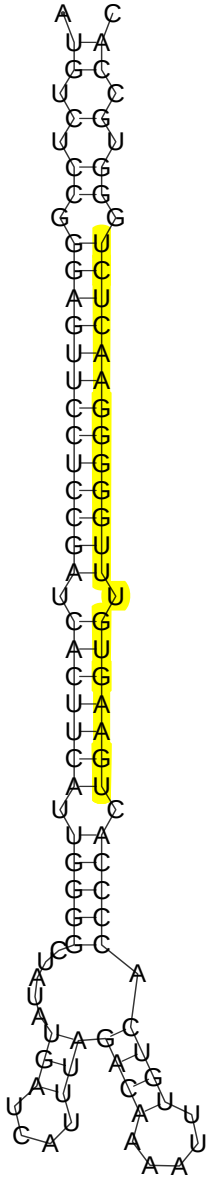
Secondary structure IV for miR395.1



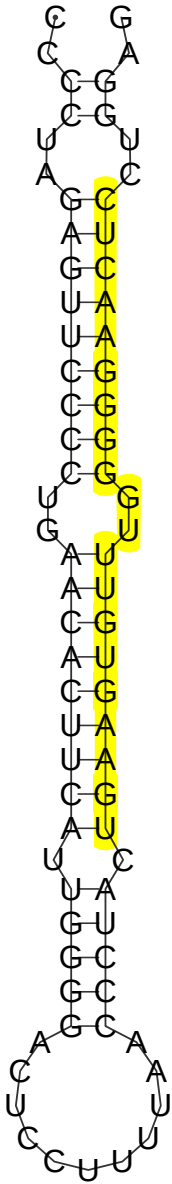
Secondary structure V for miR395.1



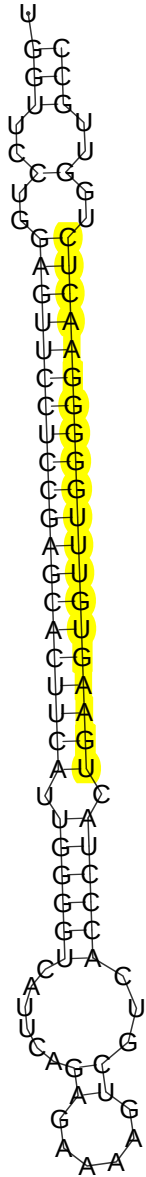
Secondary structure I for miR395.2



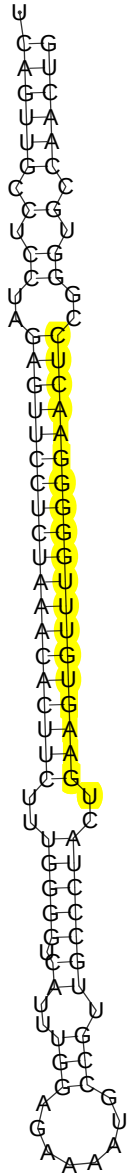
Secondary structure II
for miR395.2



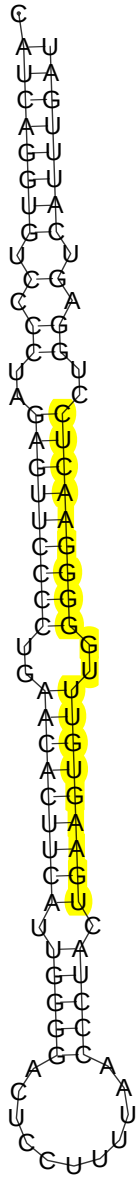
Secondary structure III for miR395.2



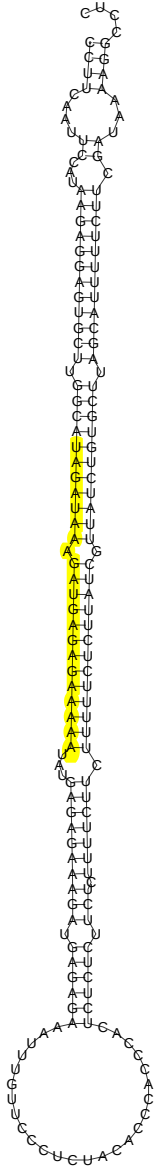
Secondary structure IV for miR395.2



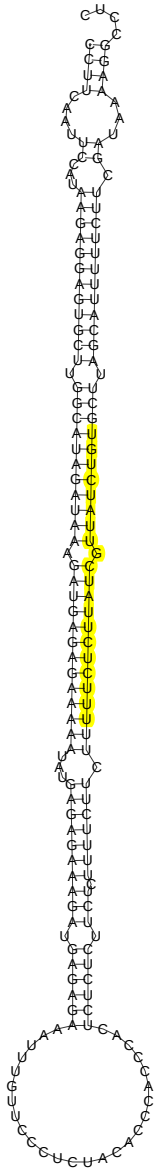
Secondary structure V for miR395.2



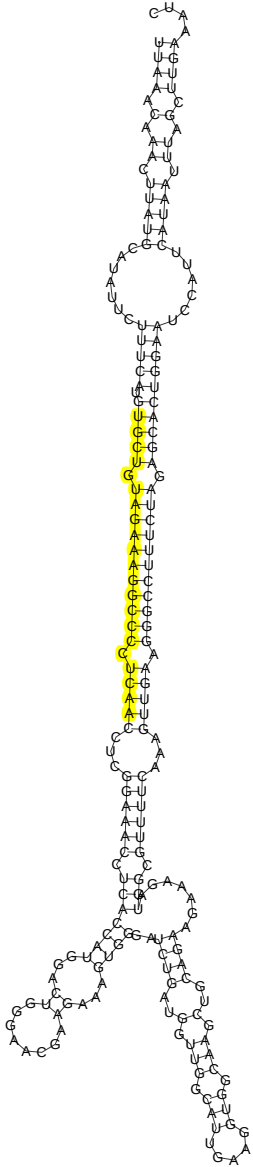
Secondary structure for miR3951



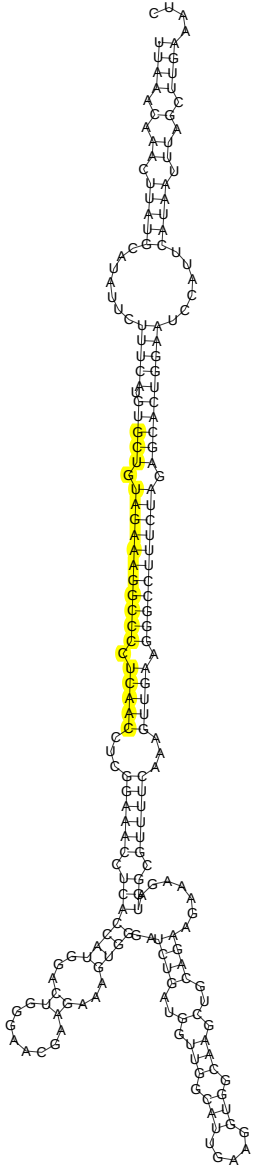
Secondary structure for miR3951-3p



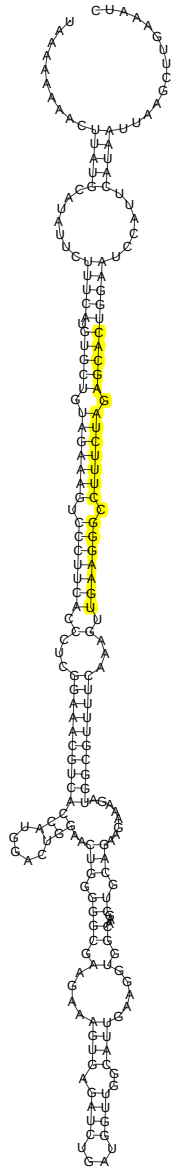
Secondary structure for miR3952.1



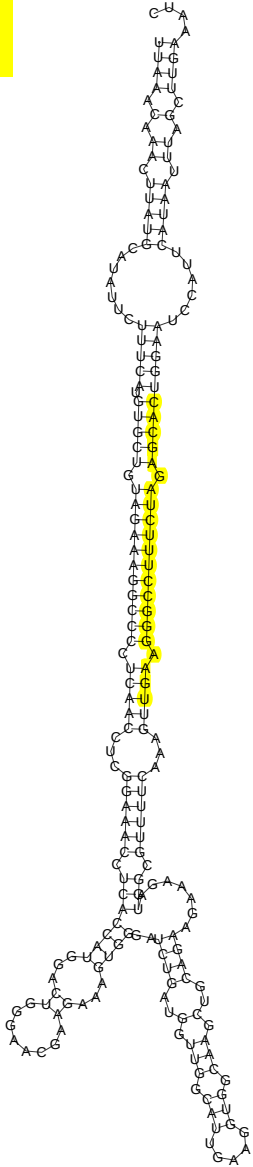
Secondary structure for miR3952.2



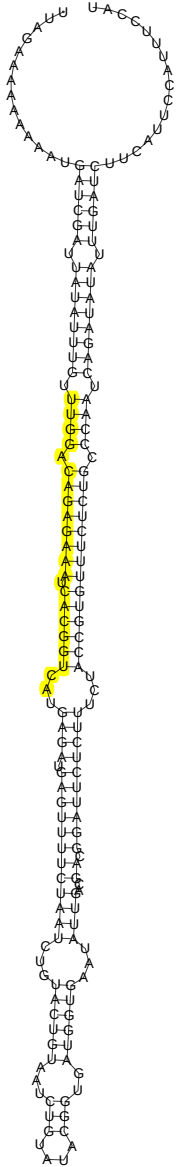
Secondary structure II for miR3952-3p



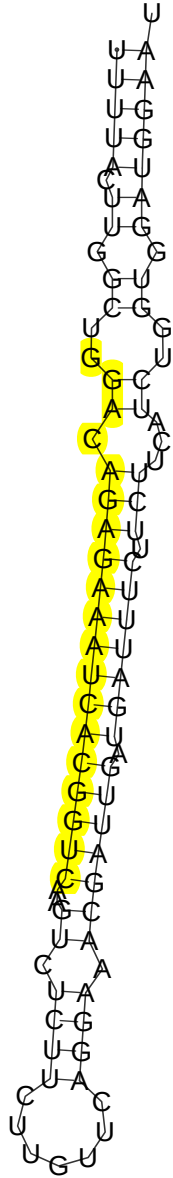
Secondary structure I for miR3952-3p



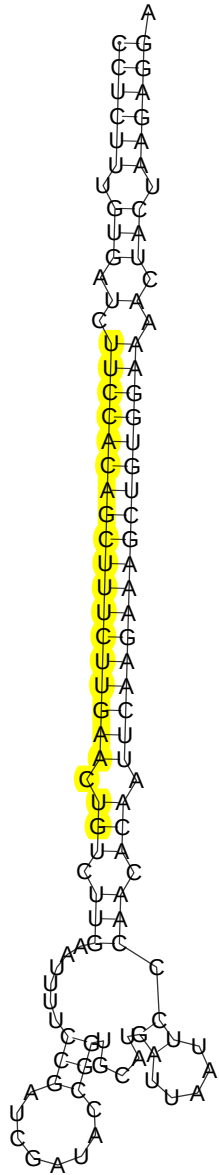
Secondary structure for miR3954a



Secondary structure for miR3954b

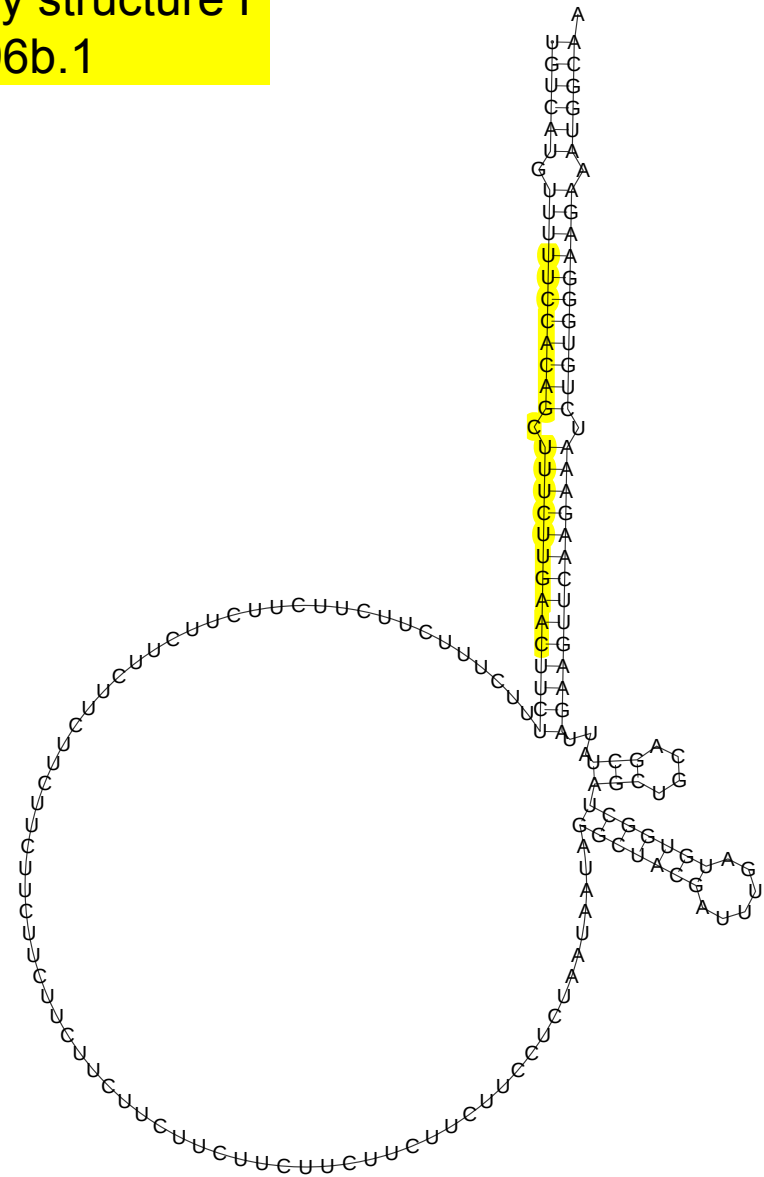


Secondary structure I for miR396a

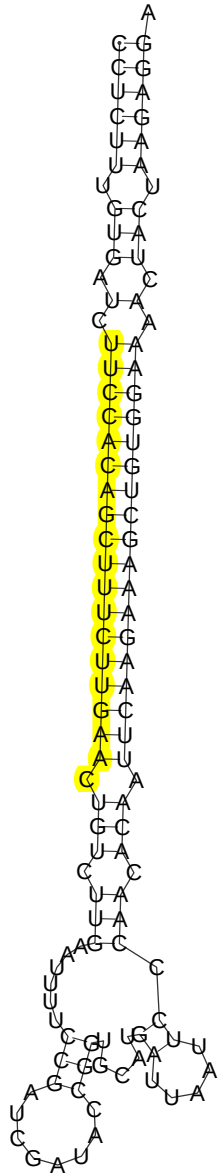


Secondary structure II for miR396a

Secondary structure I
for miR396b.1

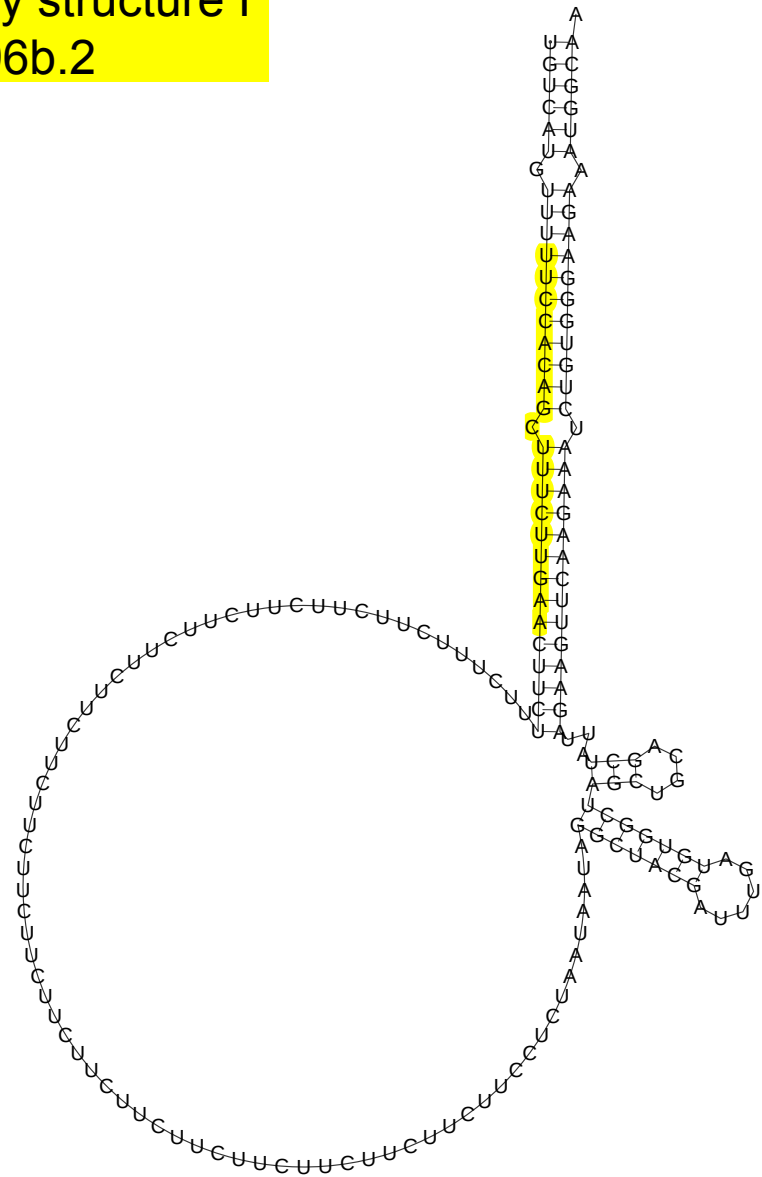


Secondary structure II
for miR396b.1

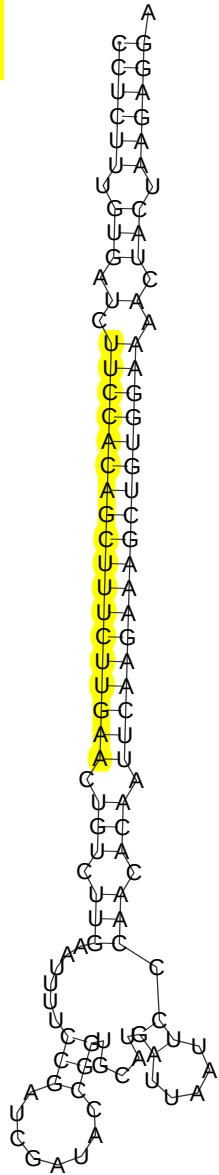


Secondary structure III for miR396b.1

Secondary structure I
for miR396b.2

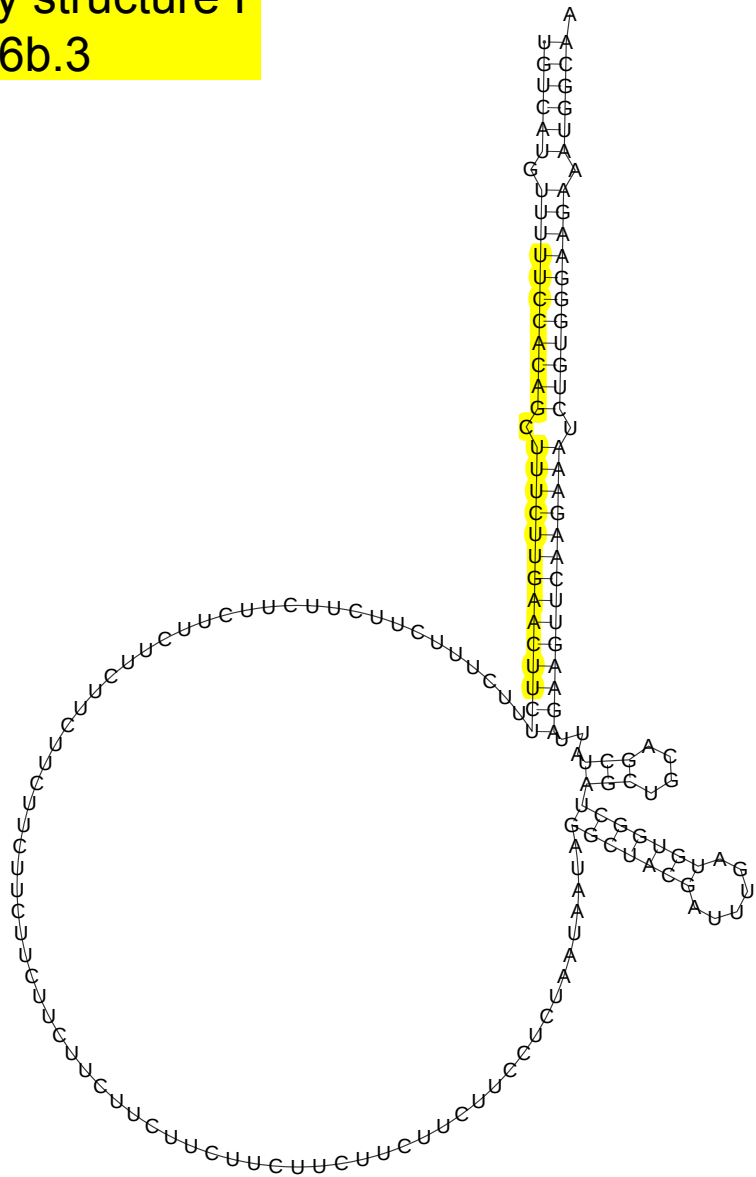


Secondary structure II for miR396b.2

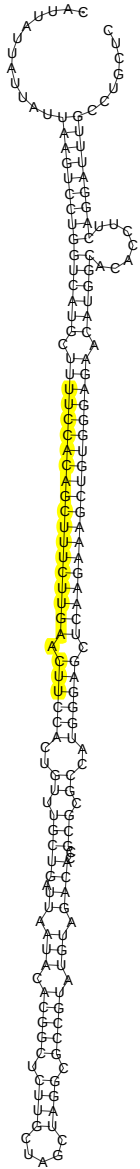


Secondary structure III for miR396b.2

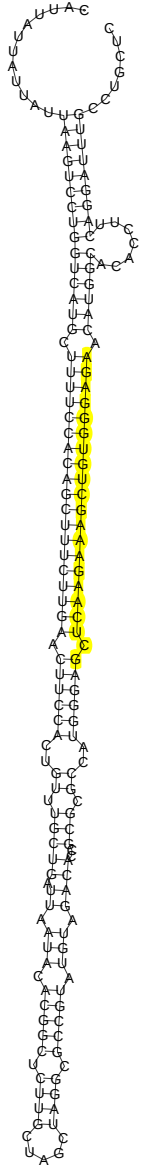
Secondary structure I
for miR396b.3



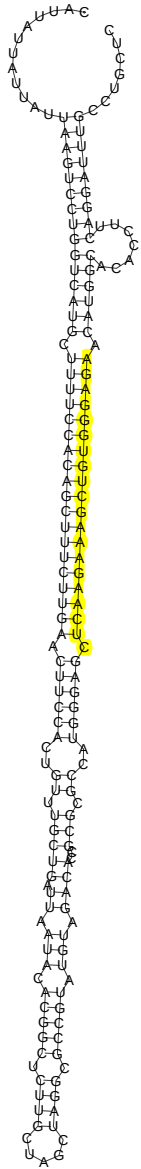
Secondary structure II for miR396b.3



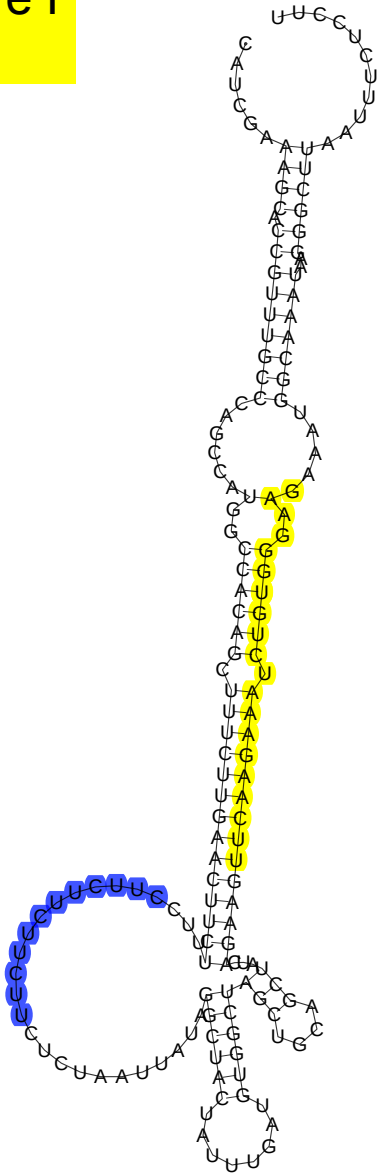
Secondary structure for miR396b-3p.1



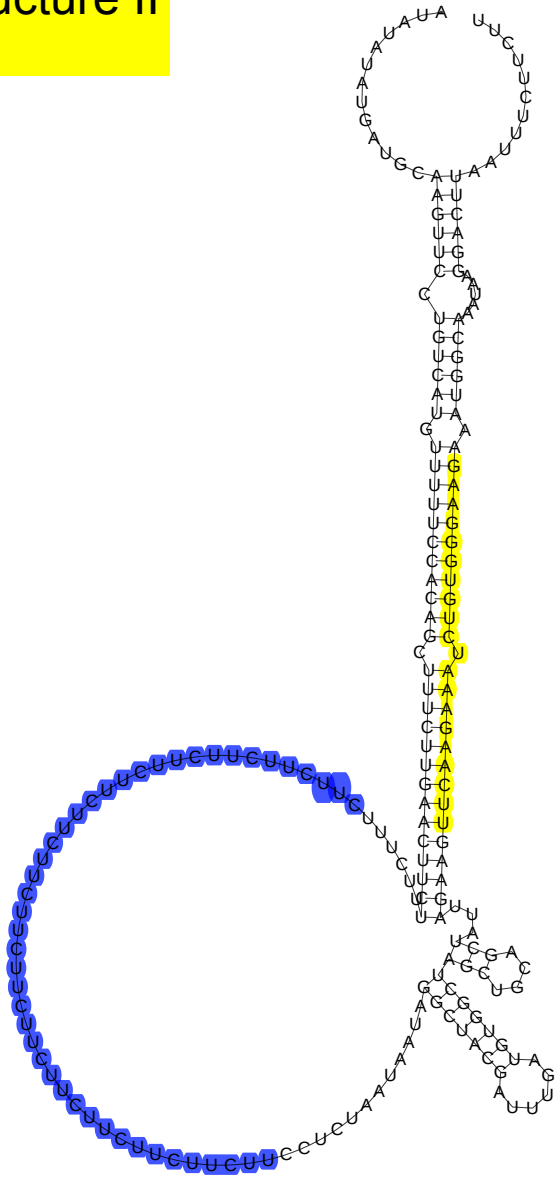
Secondary structure for miR396b-3p.2



Secondary structure I for miR396c

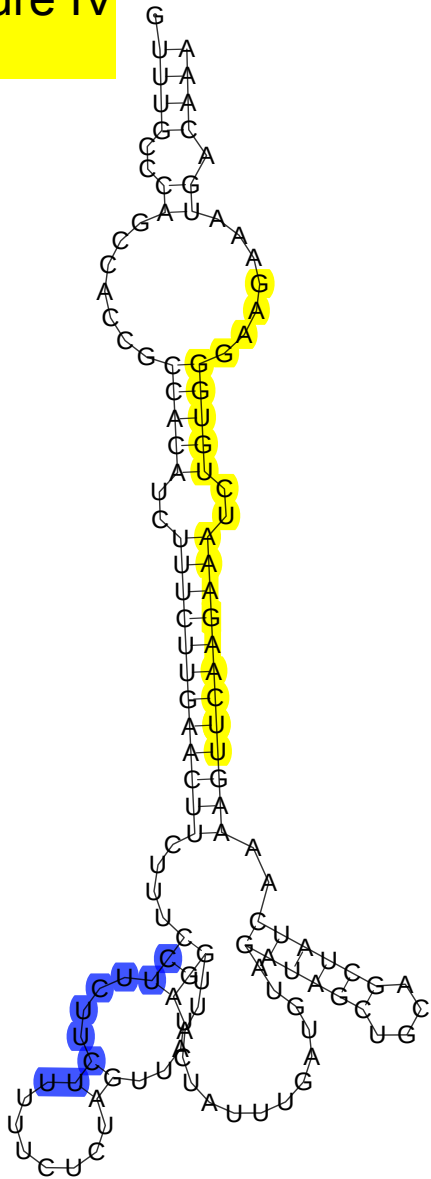


Secondary structure II for miR396c

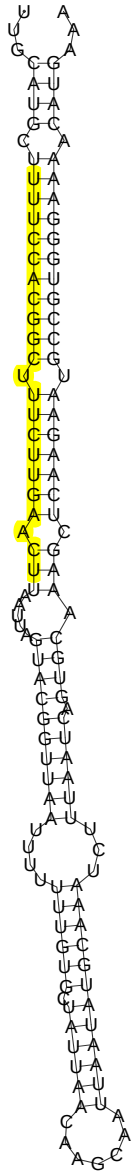


Secondary structure III for miR396c

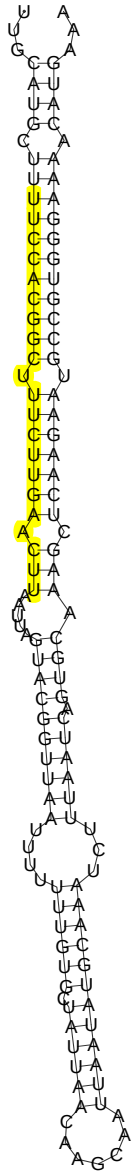
Secondary structure IV for miR396c



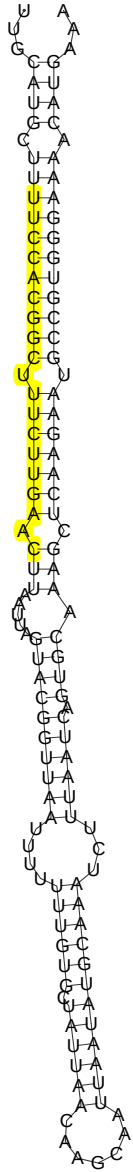
Secondary structure for miR396d.1



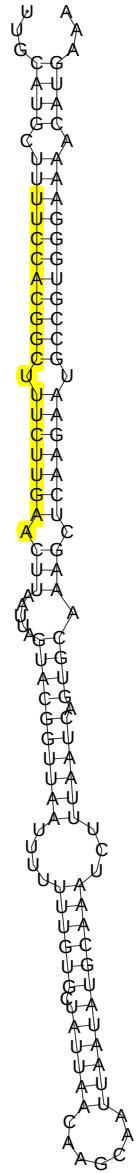
Secondary structure for miR396d.2



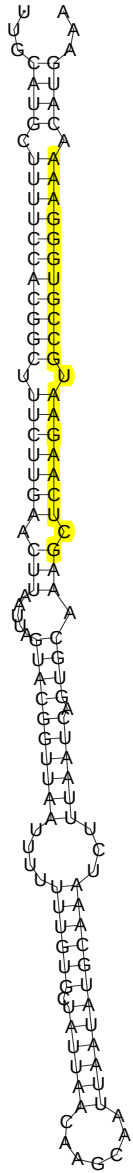
Secondary structure for miR396d.3



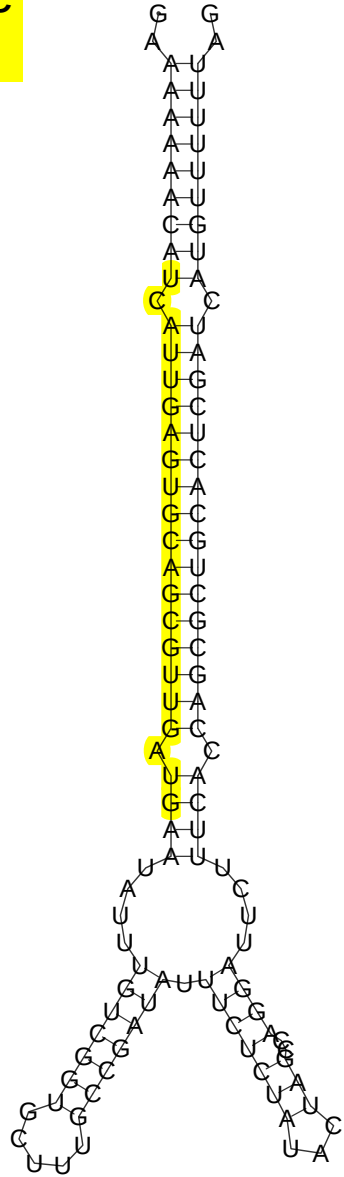
Secondary structure for miR396d.4



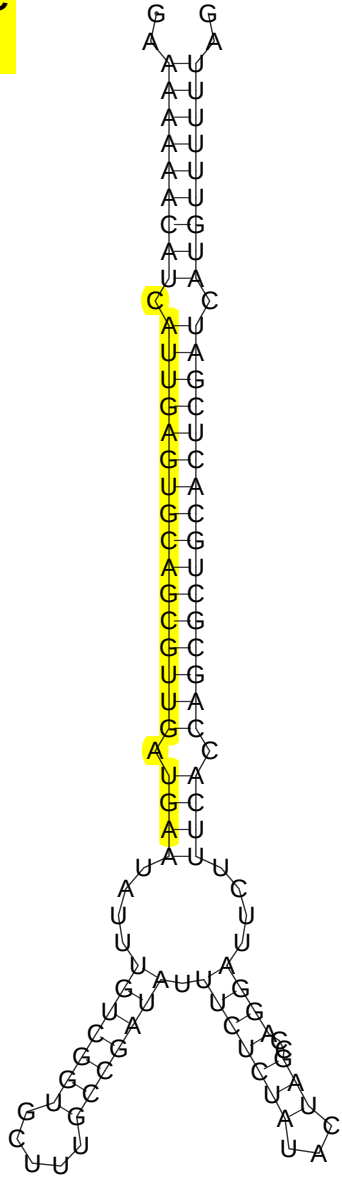
Secondary structure for miR396d-3p



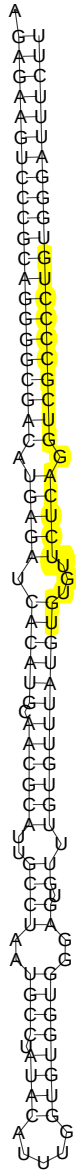
Secondary structure for miR397.1



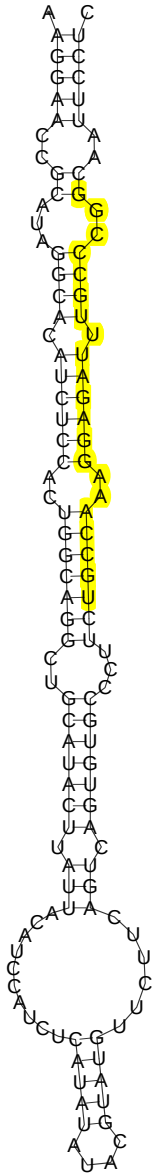
Secondary structure for miR397.2



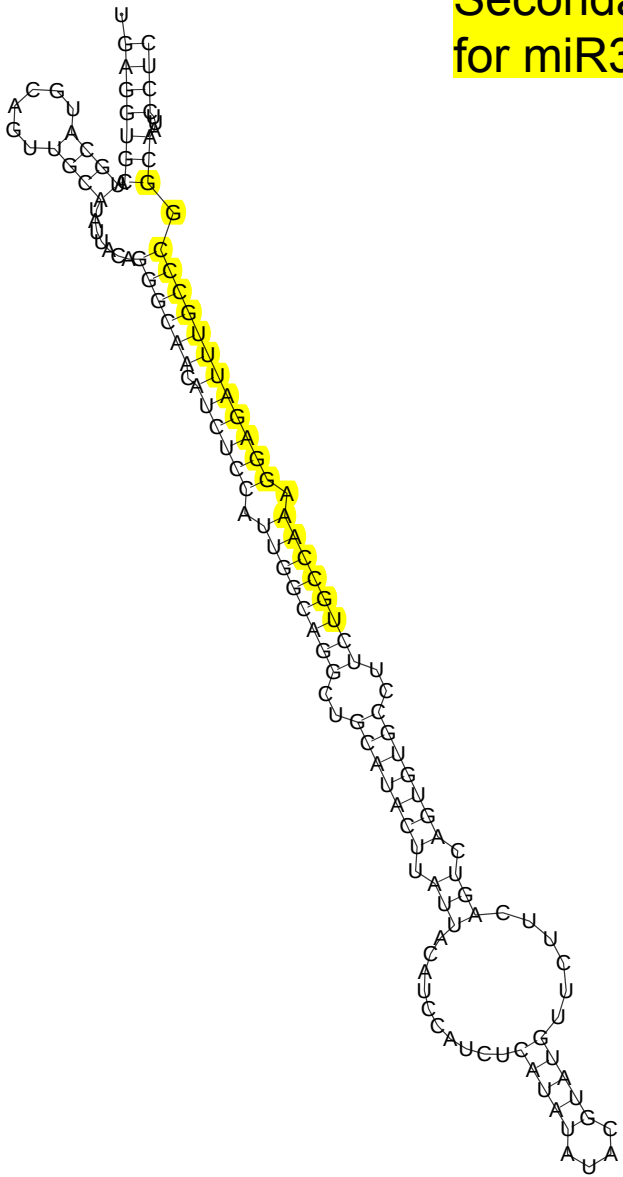
Secondary structure for miR398b



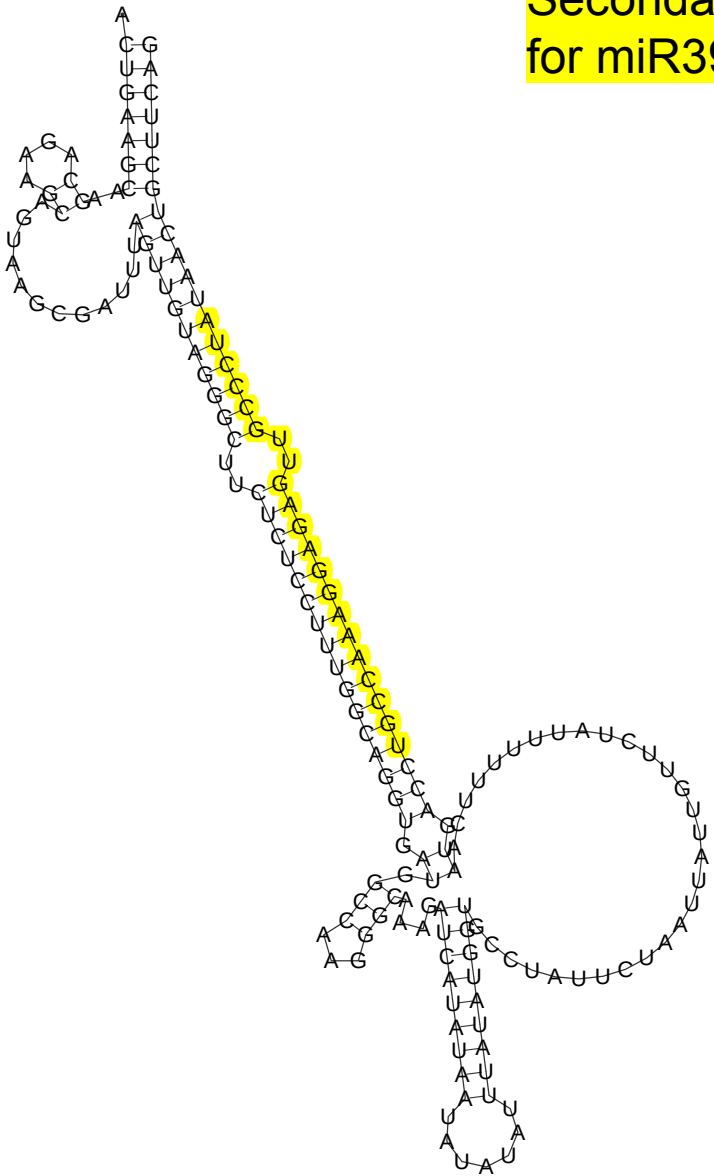
Secondary structure I for miR399a



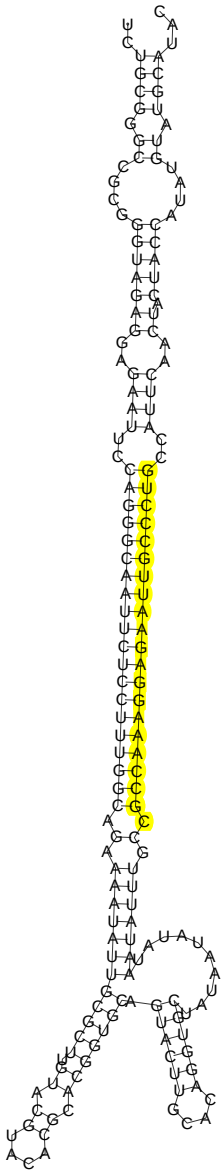
Secondary structure II for miR399a



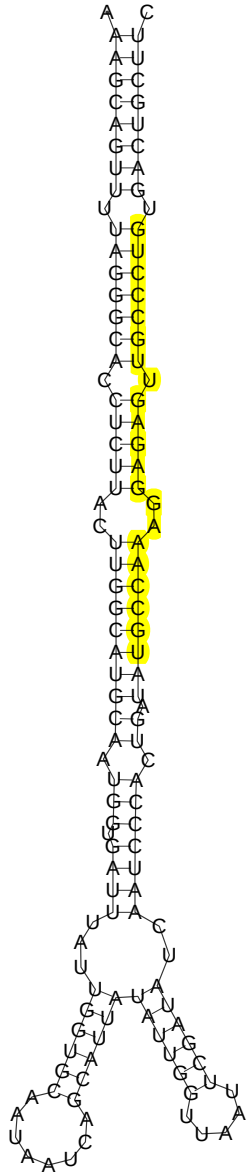
Secondary structure for miR399b



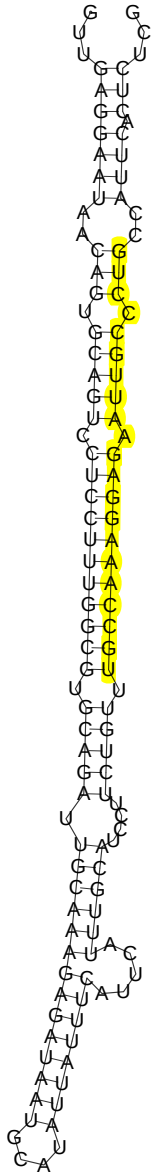
Secondary structure for miR399c



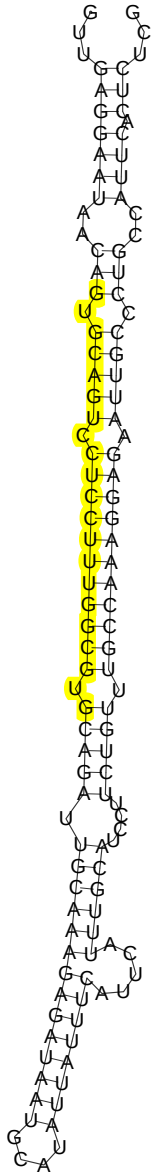
Secondary structure for miR399d



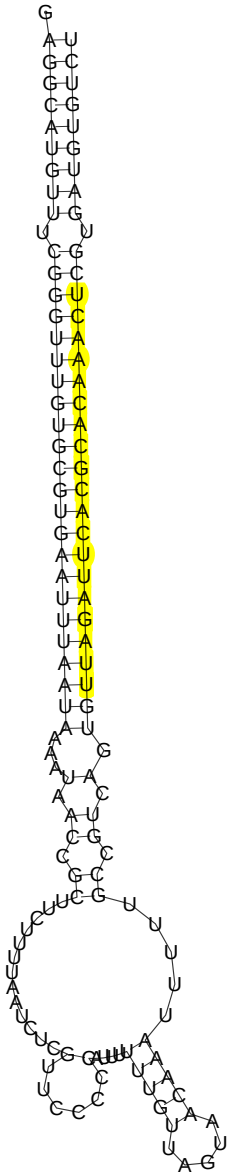
Secondary structure for miR399e



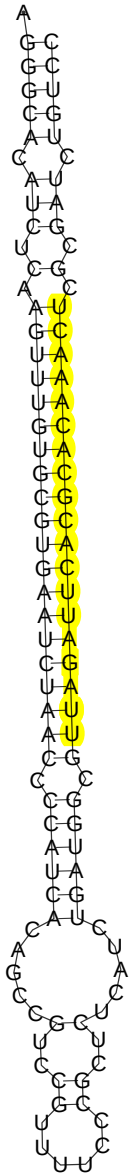
Secondary structure for miR399e-5p



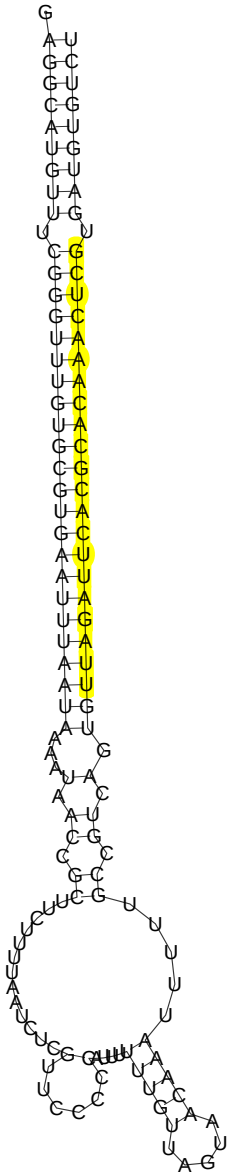
Secondary structure I for miR403.1



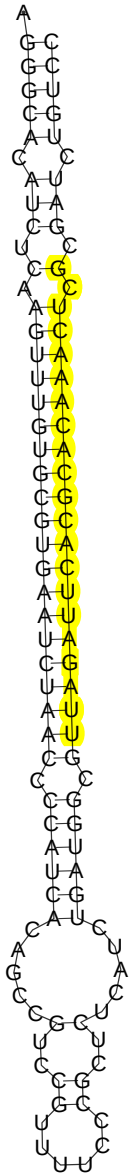
Secondary structure II for miR403.1



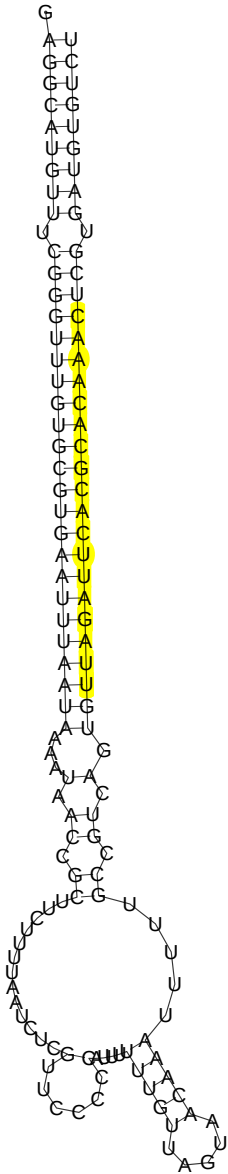
Secondary structure I for miR403.2



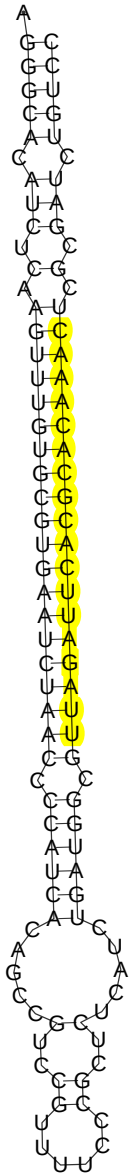
Secondary structure II for miR403.2



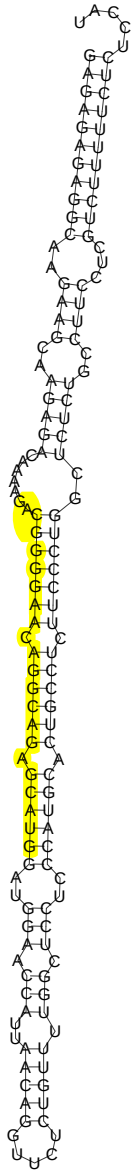
Secondary structure I for miR403.3



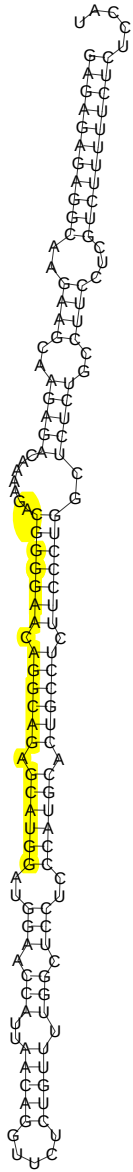
Secondary structure II for miR403.3



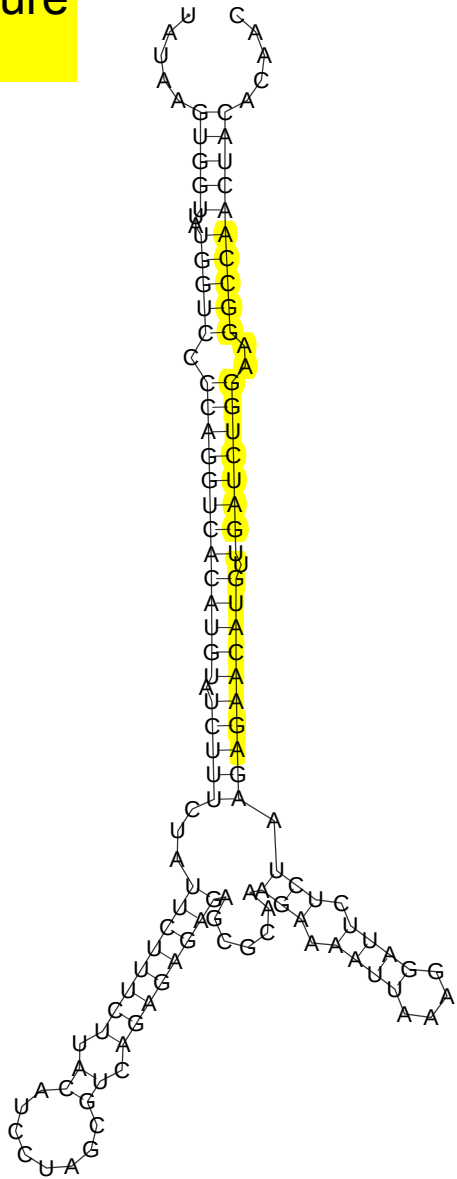
Secondary structure for miR408.1



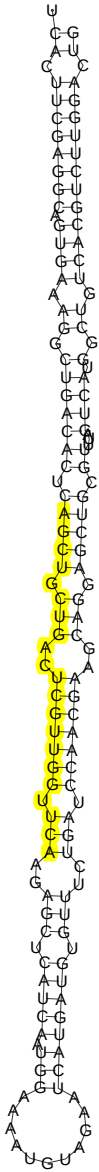
Secondary structure for miR408.2



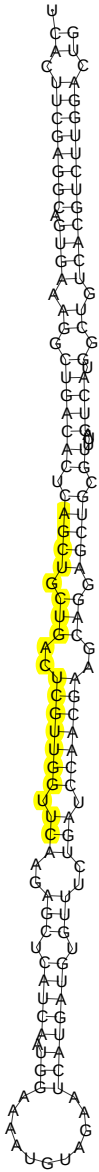
Secondary structure for miR4369



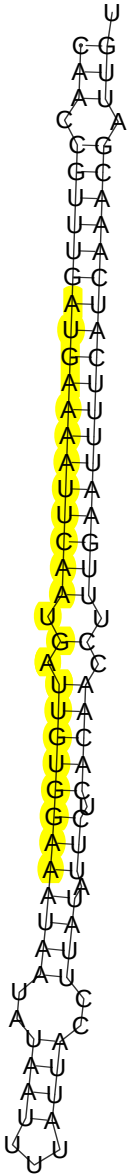
Secondary structure for miR4414.1



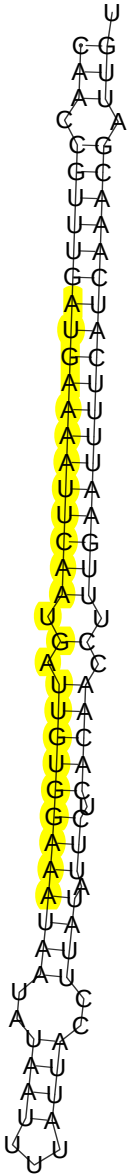
Secondary structure for miR4414.2



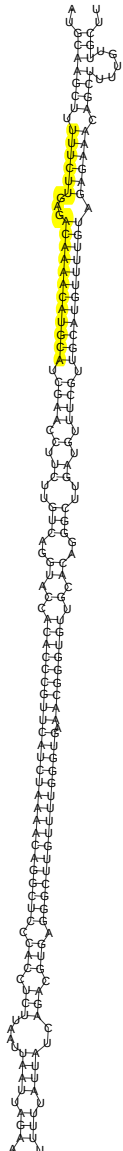
Secondary structure for miR443b.1



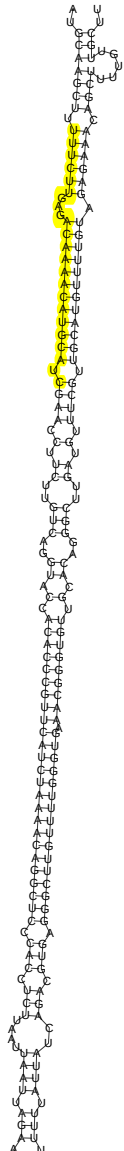
Secondary structure for miR443b.2



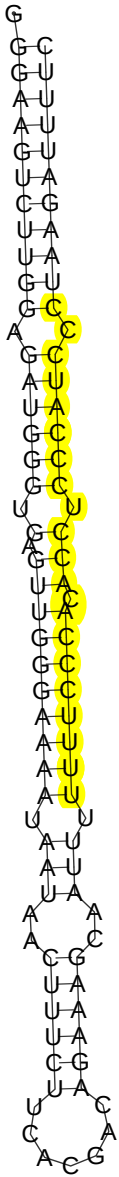
Secondary structure for miR444a.1



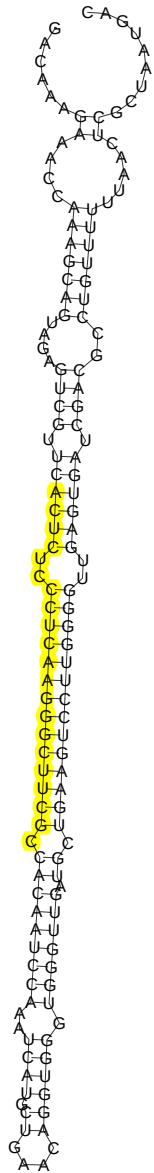
Secondary structure for miR444a.2



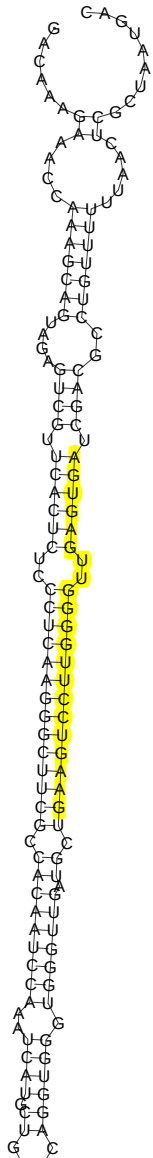
Secondary structure for miR472



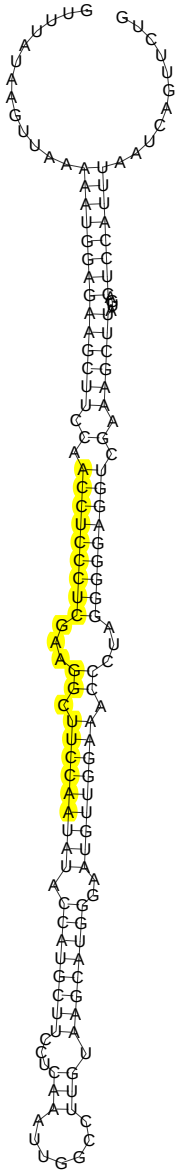
Secondary structure for miR473



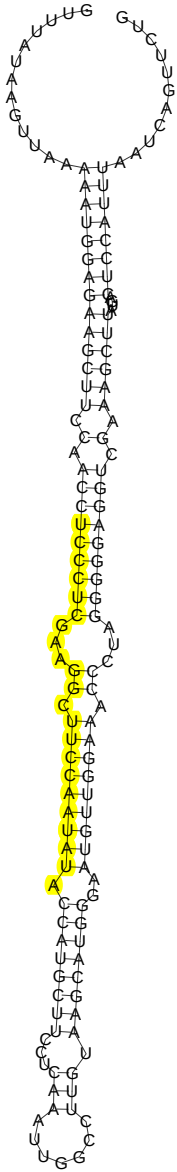
Secondary structure for miR473-3p



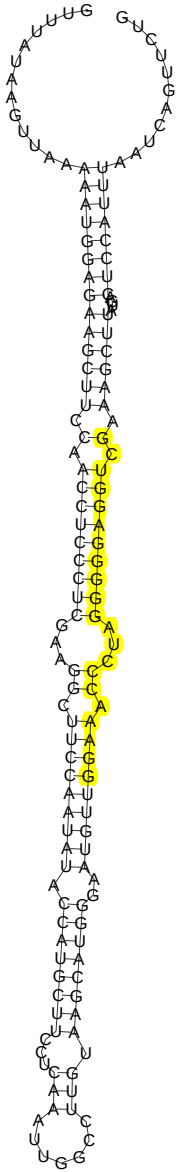
Secondary structure for miR477a.1



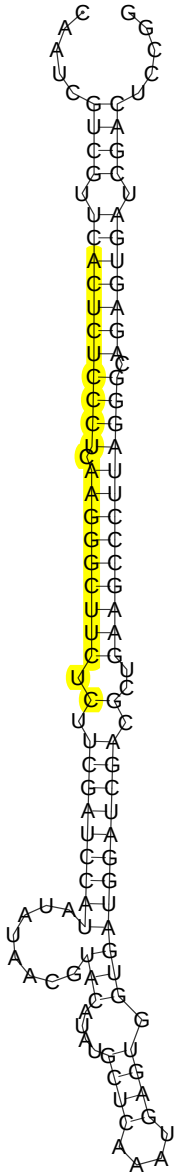
Secondary structure for miR477a.2



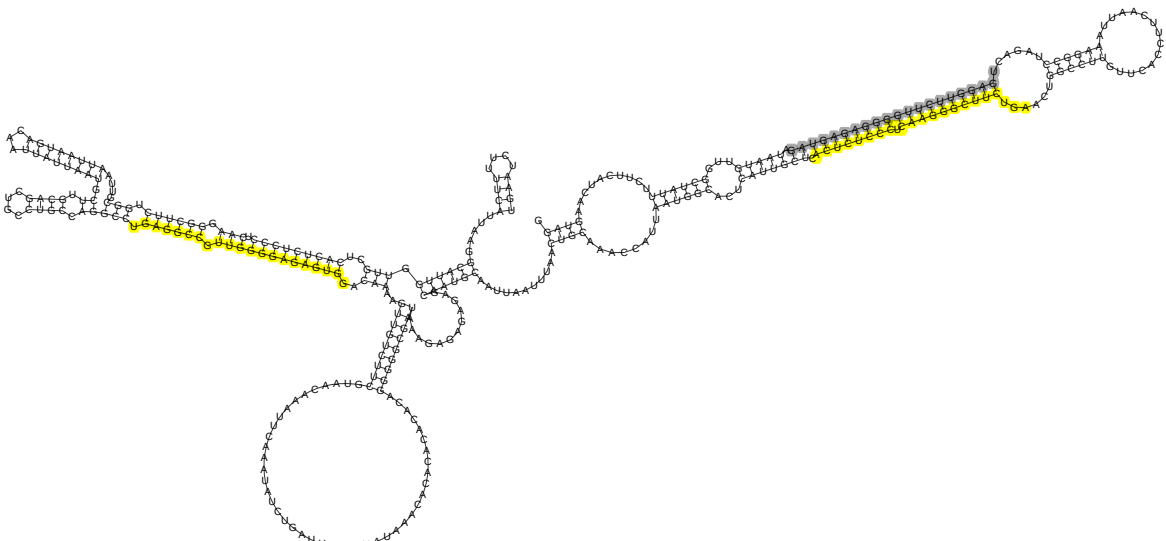
Secondary structure for miR477a-3p



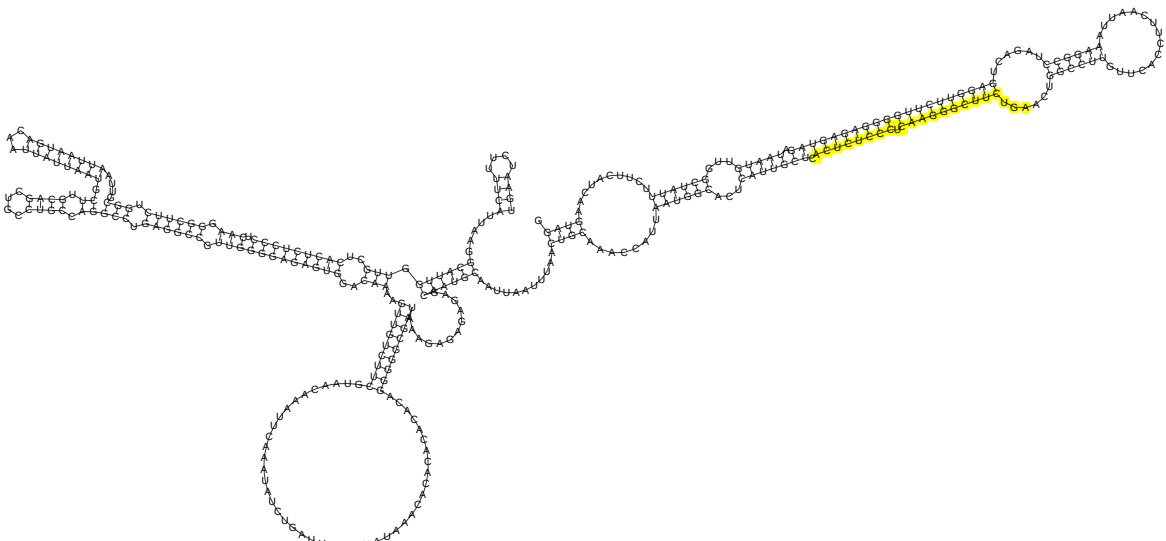
Secondary structure for miR477b.2



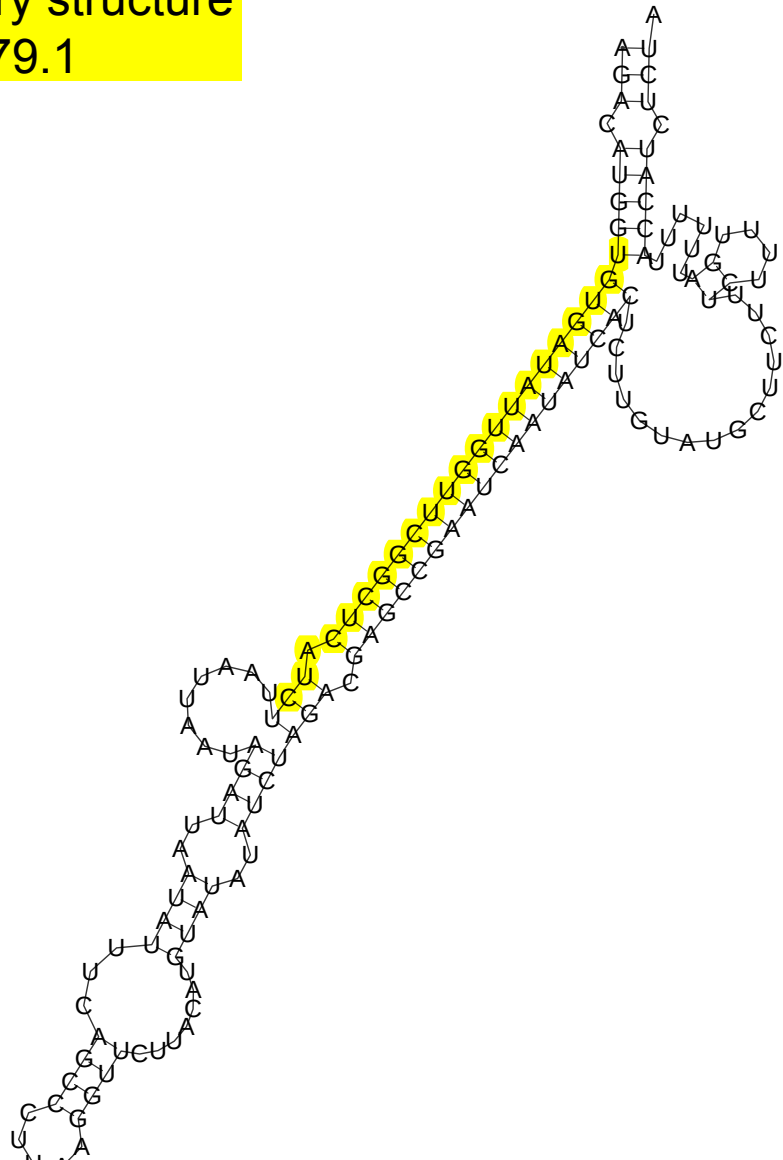
Secondary structure for miR477d.1-3p



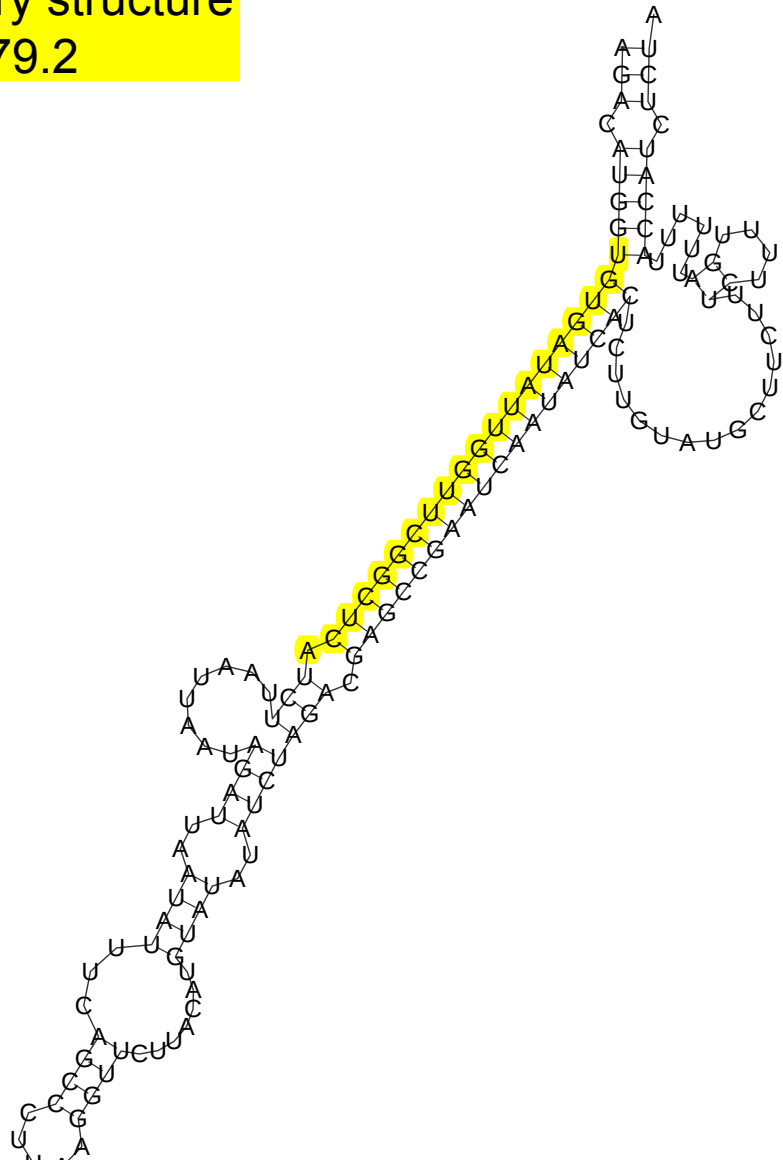
Secondary structure for miR477d.2-5p



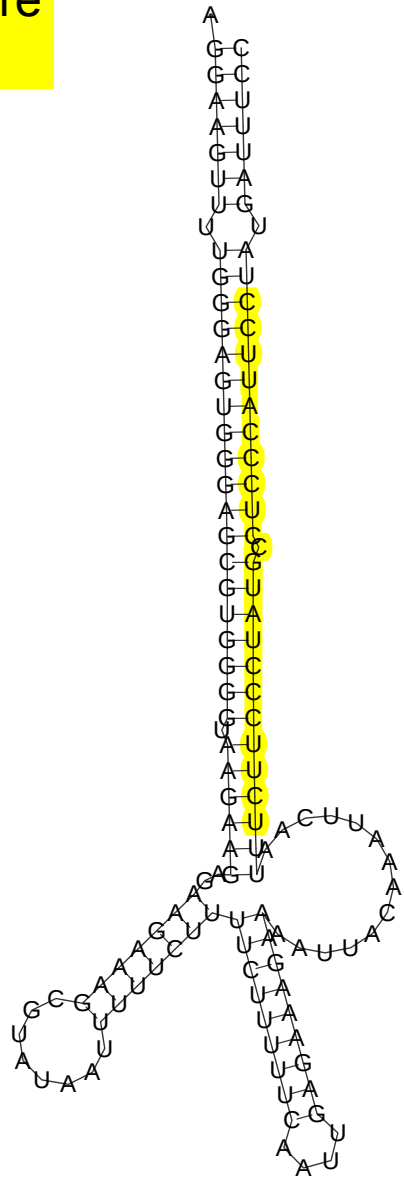
Secondary structure for miR479.1



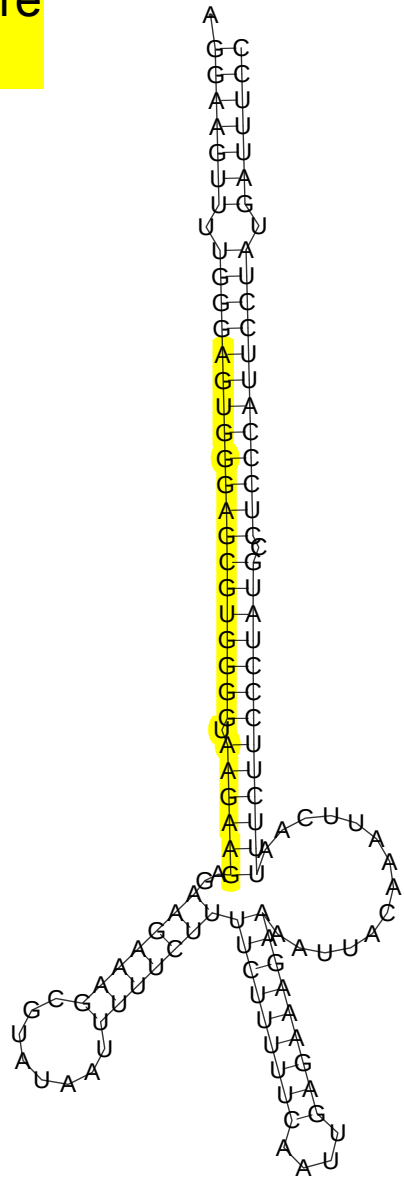
Secondary structure for miR479.2



Secondary structure for miR482a-3p

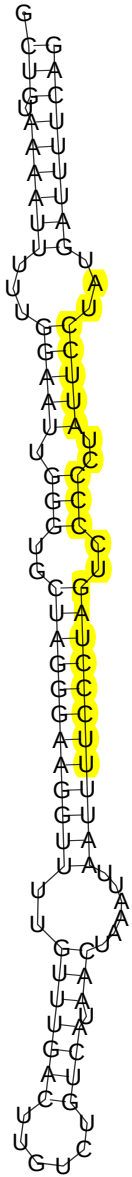


Secondary structure for miR482a-5p

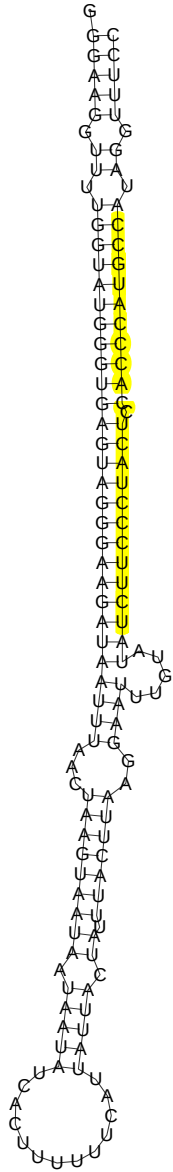


Secondary structure for miR482b

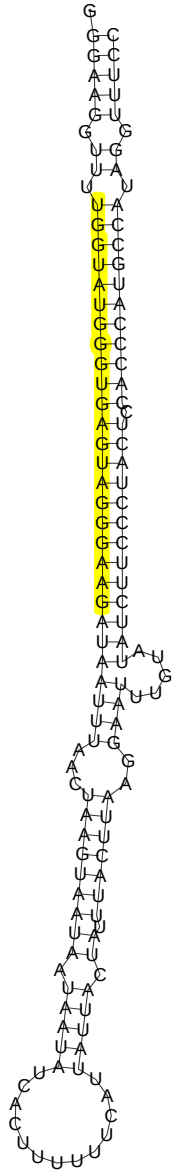
Secondary structure for miR482c



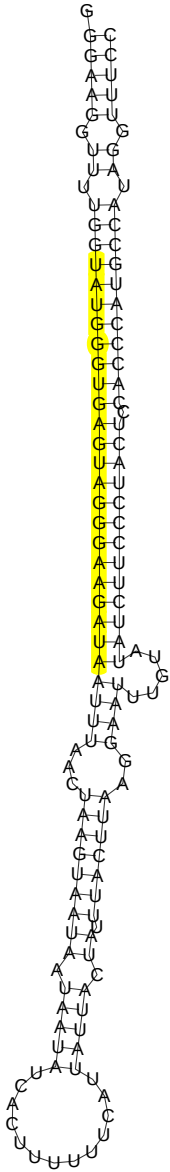
Secondary structure for miR482d



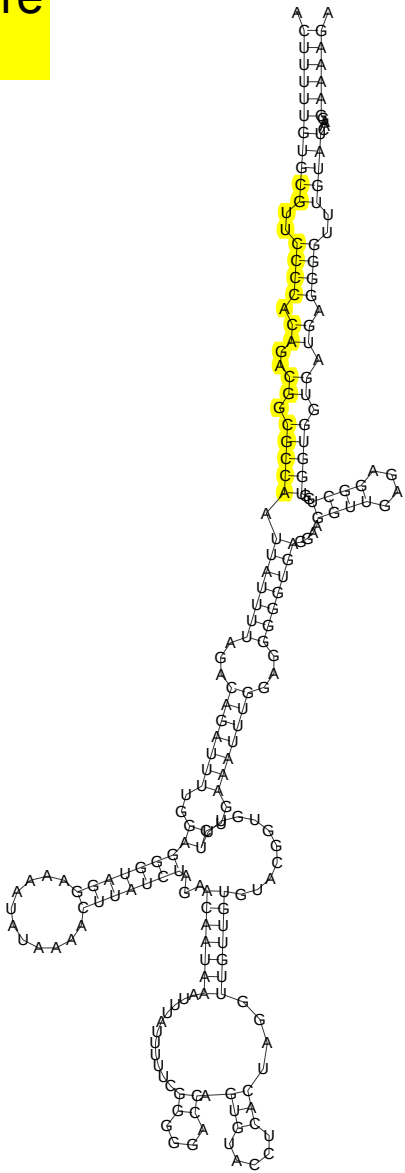
Secondary structure for miR482d-5p.1



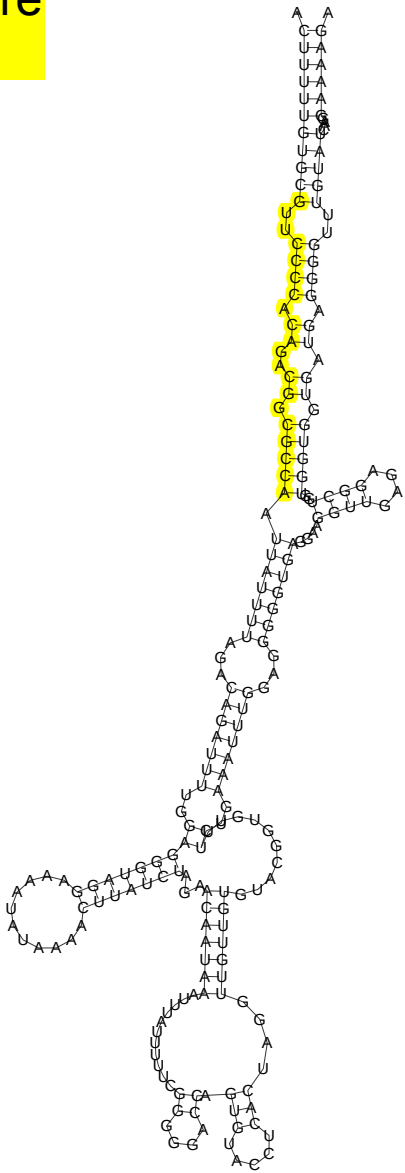
Secondary structure for miR482d-5p.2



Secondary structure for miR5054.1

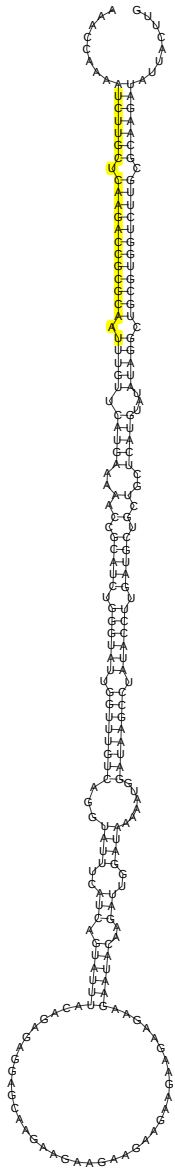


Secondary structure for miR5054.2

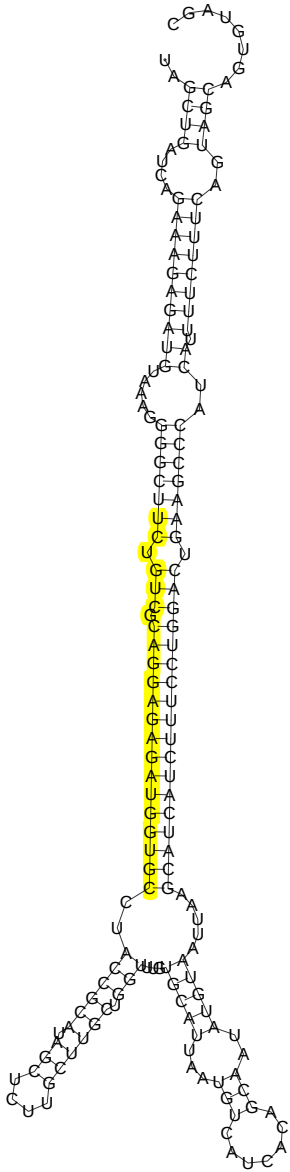


Secondary structure for miR5177

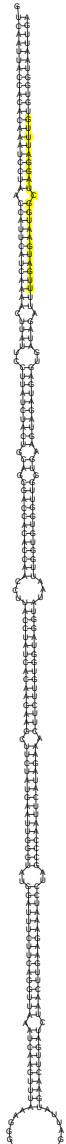
Secondary structure for miR5179



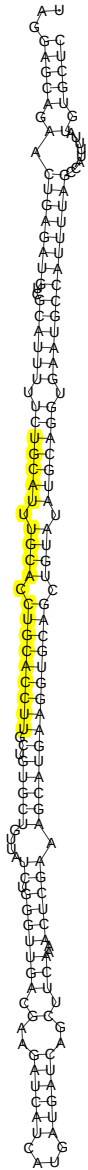
Secondary structure for miR5225a



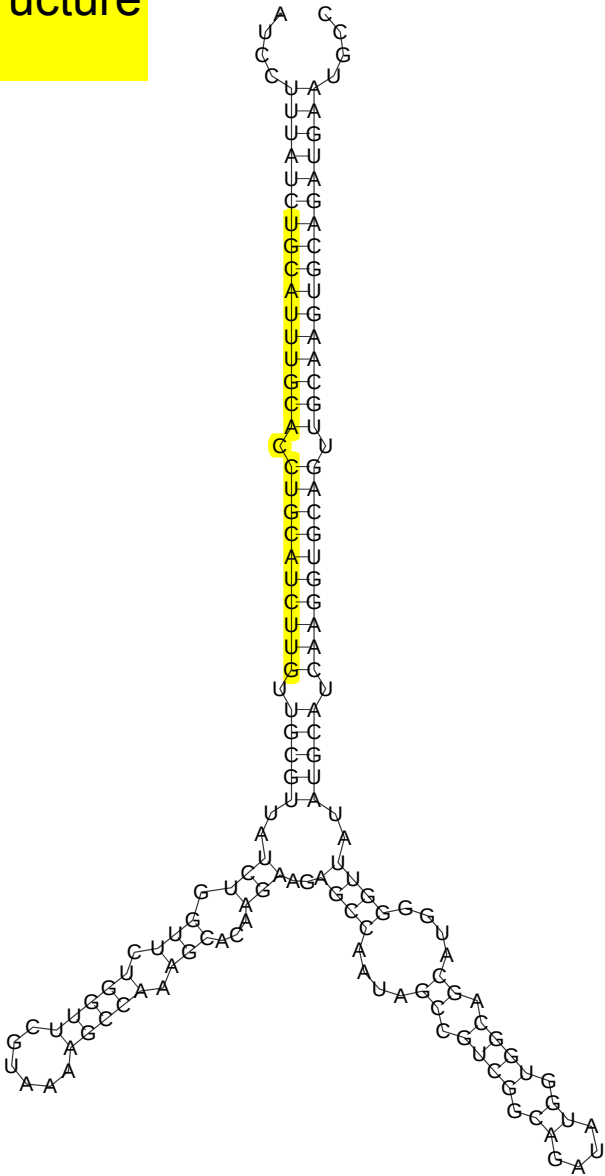
Secondary structure for miR5291a



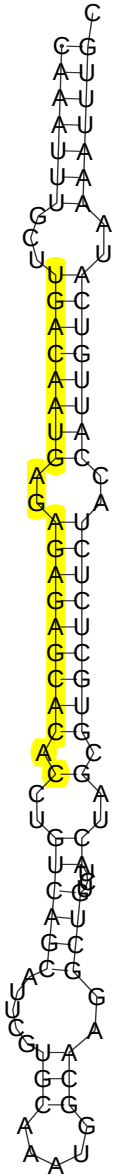
Secondary structure for miR530a



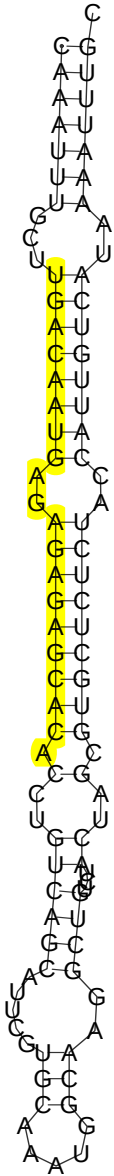
Secondary structure for miR530b



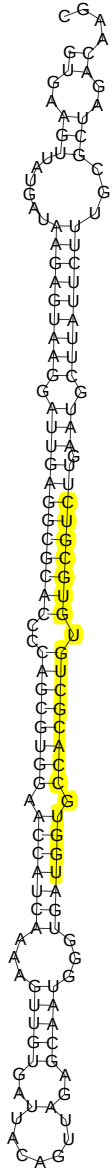
Secondary structure for miR535.1



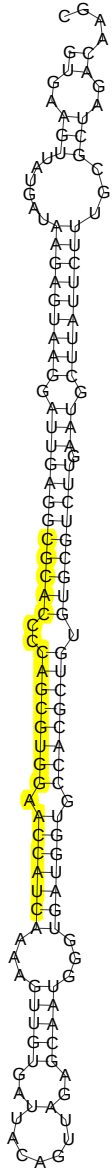
Secondary structure for miR535.2



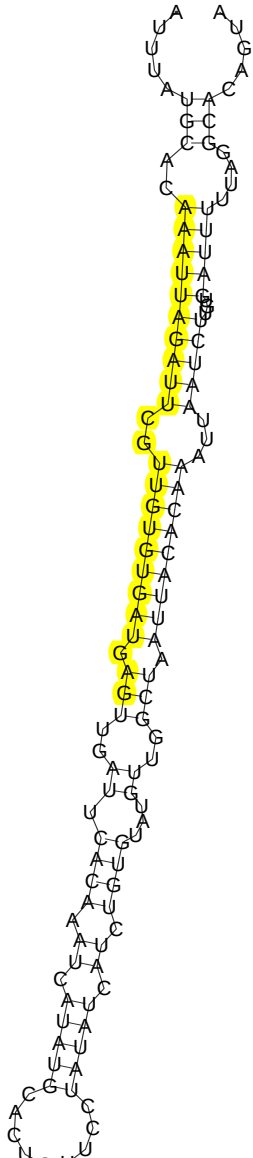
Secondary structure for miR536-3p



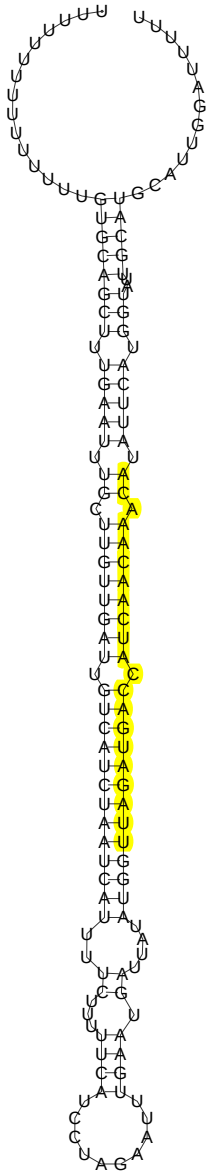
Secondary structure for miR536-5p



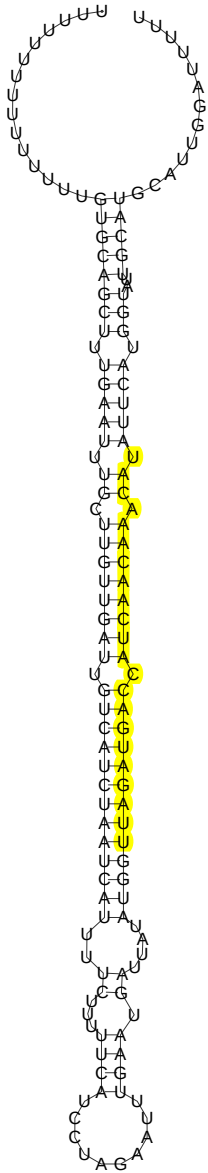
Secondary structure for miR814



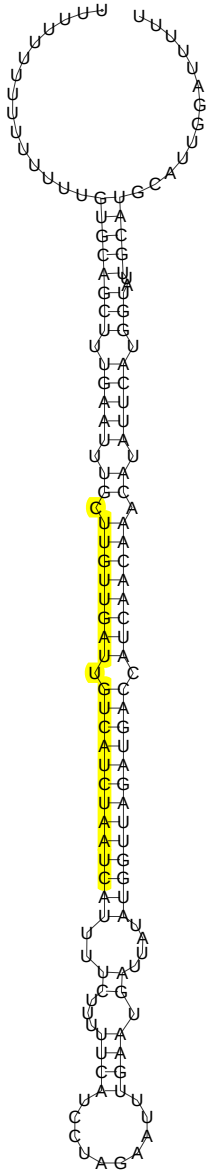
Secondary structure for miR827.1



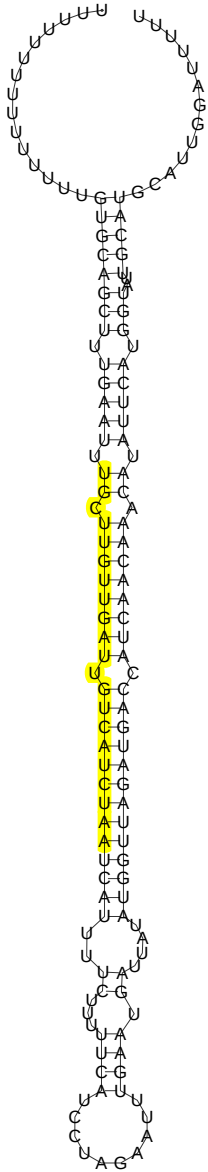
Secondary structure for miR827.2



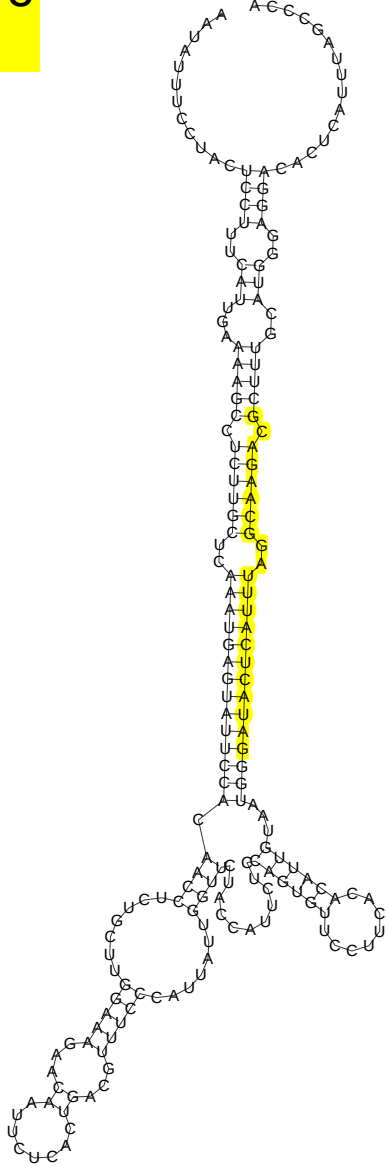
Secondary structure for miR827-5p.1



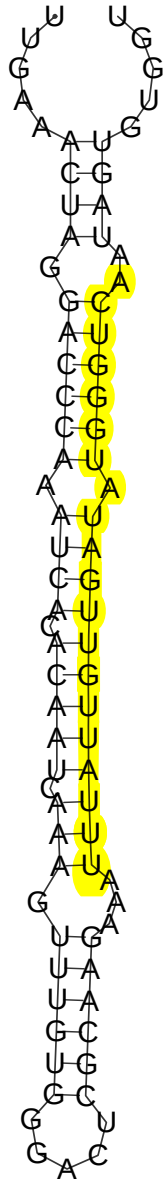
Secondary structure for miR827-5p.2



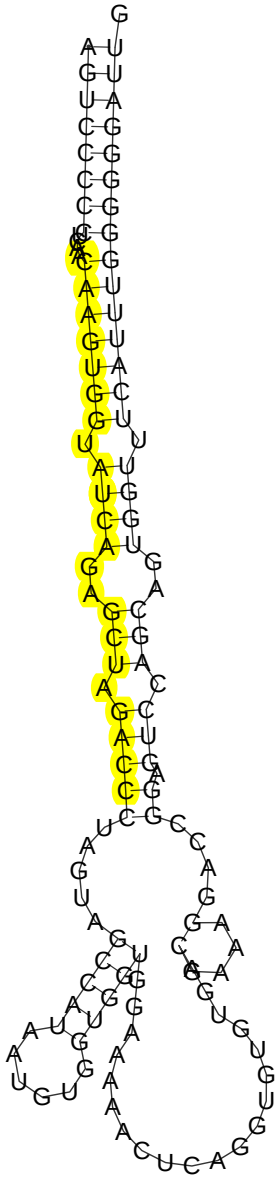
Secondary structure for miR828



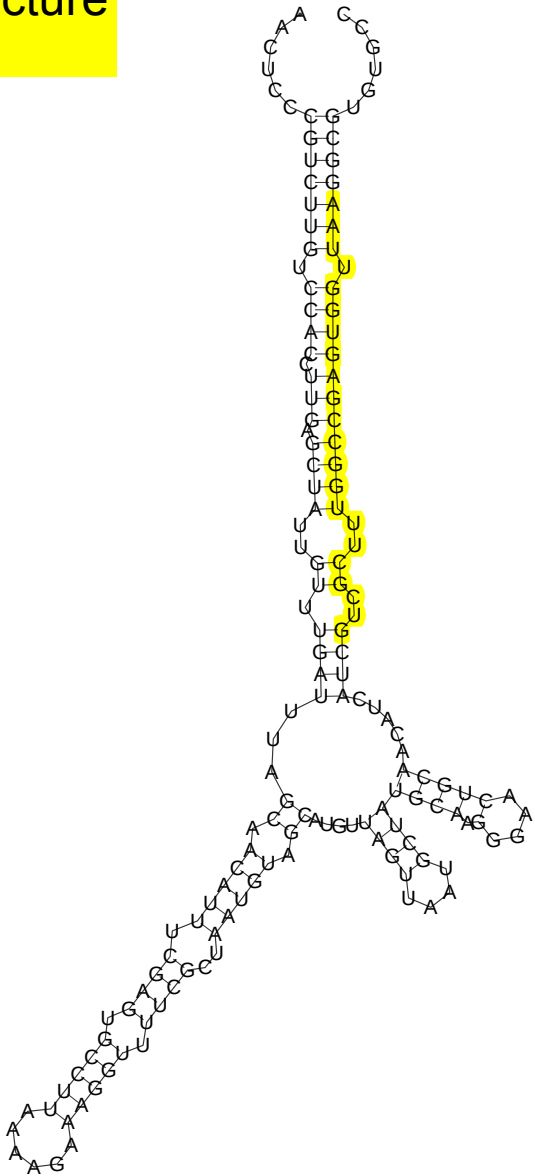
Secondary structure for miR833.1



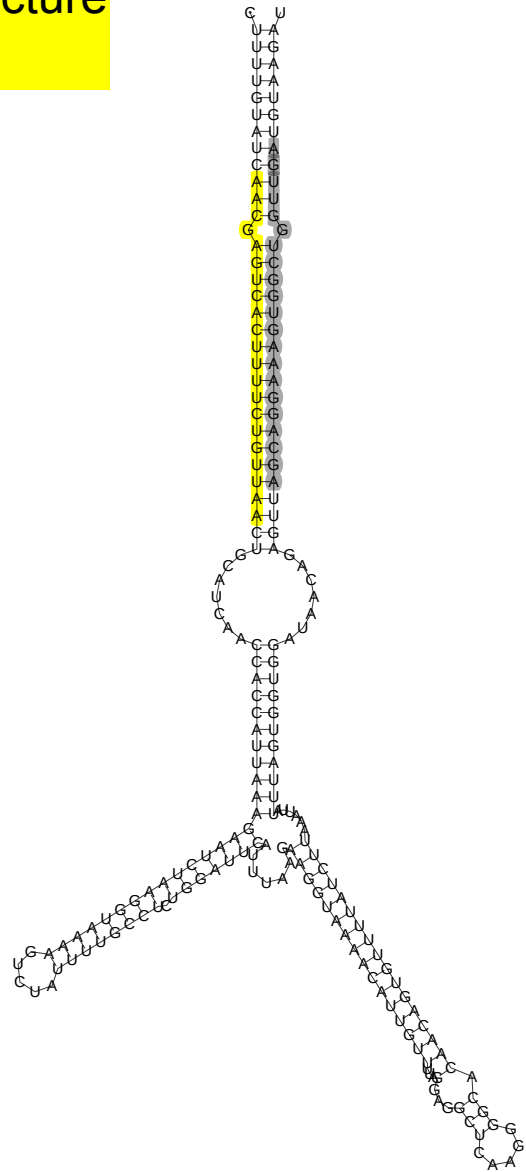
Secondary structure for miR845a



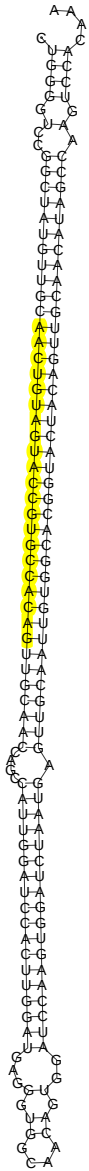
Secondary structure for miR896



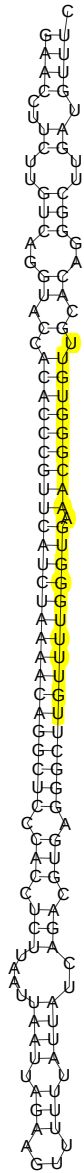
Secondary structure for miRN01



Secondary structure for miRN02

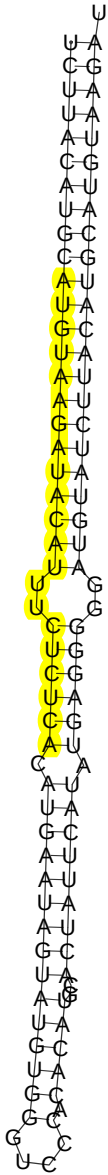


Secondary structure for miRN03

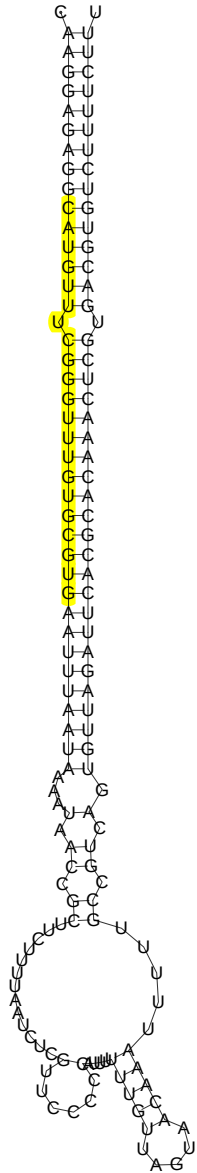


Secondary structure for miRN04

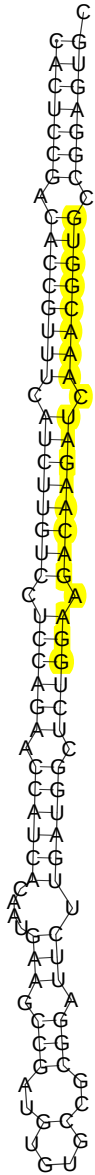
Secondary structure for miRN05



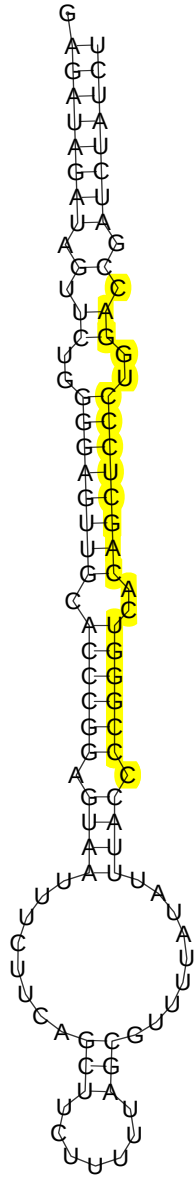
Secondary structure for miRN06



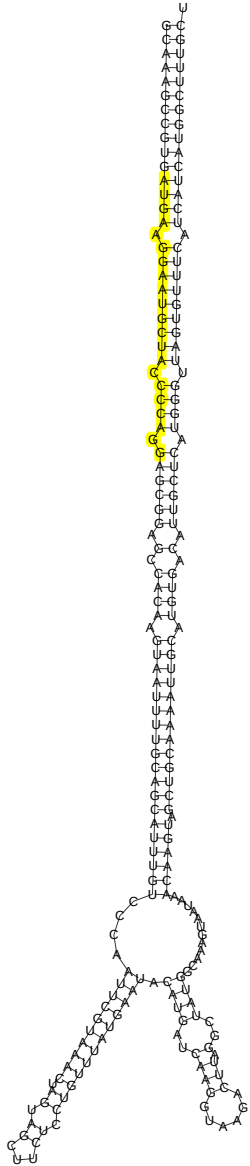
Secondary structure for miRN07



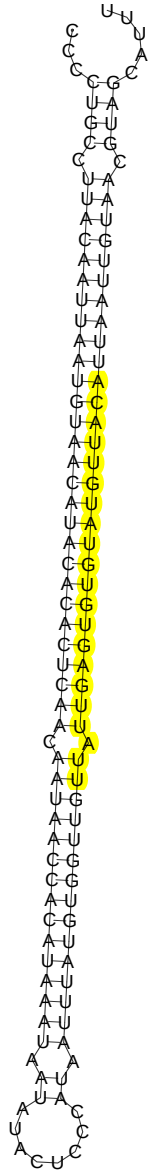
Secondary structure for miRN08



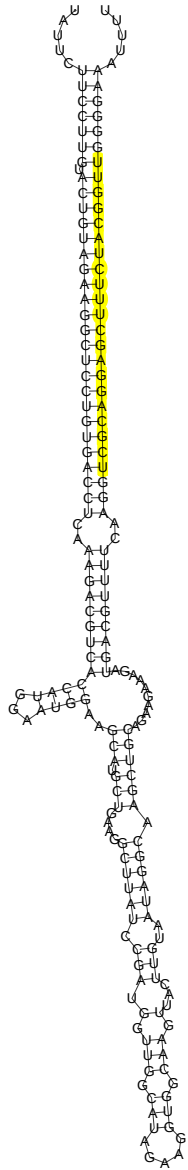
Secondary structure for miRN09



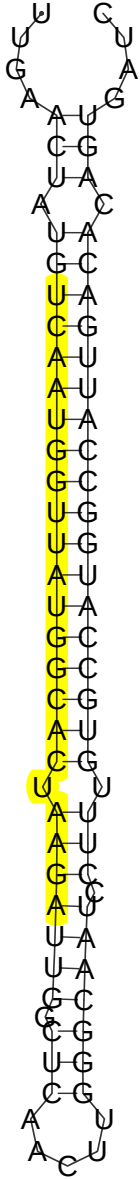
Secondary structure for miRN10



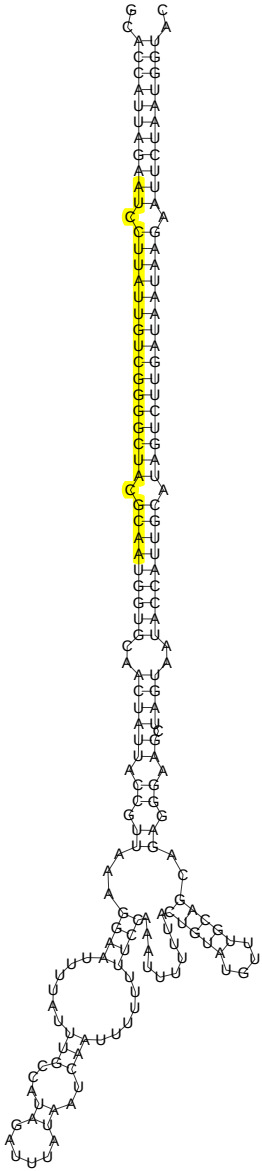
Secondary structure for miRN11



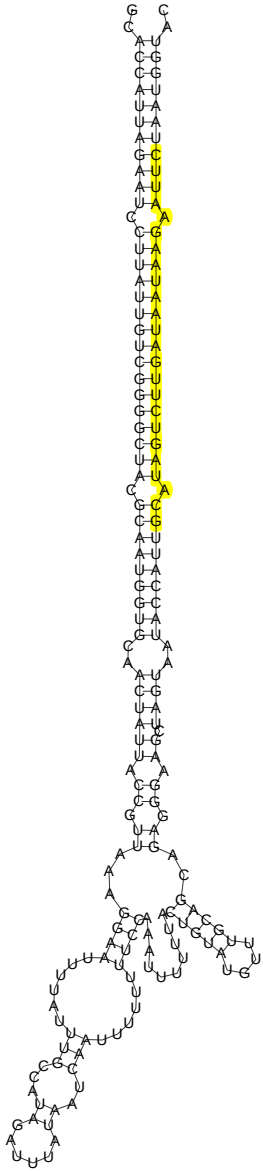
Secondary structure for miRN12



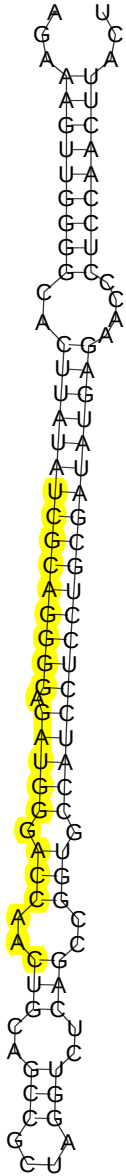
Secondary structure for miRN13



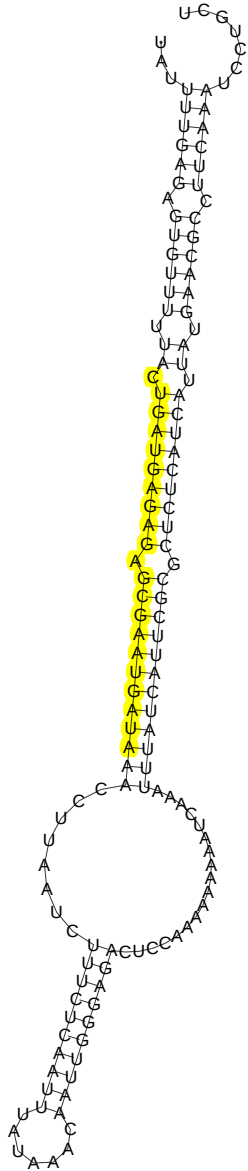
Secondary structure for miRN14



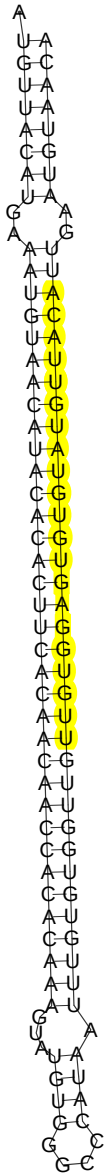
Secondary structure for miRN15



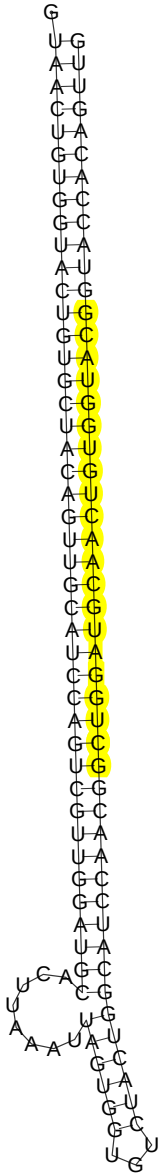
Secondary structure for miRN16



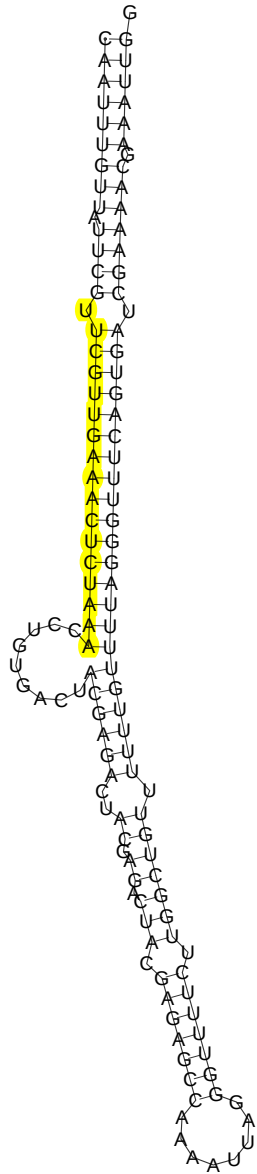
Secondary structure for miRN17



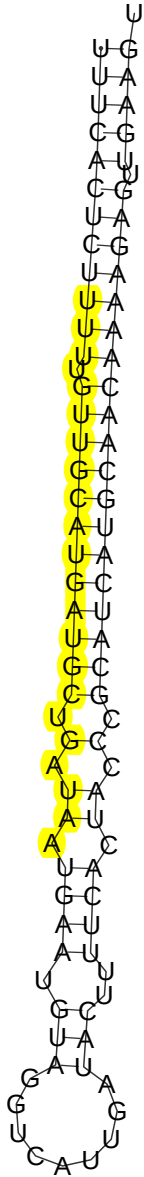
Secondary structure for miRN18



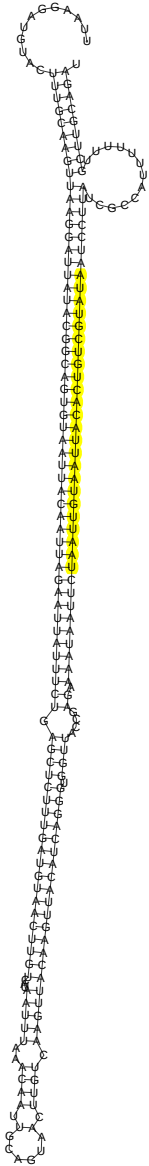
Secondary structure for miRN19



Secondary structure for miRN20

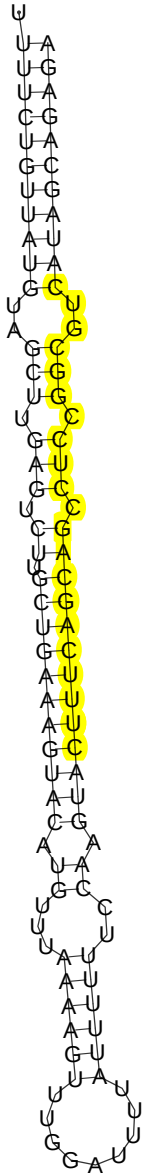


Secondary structure for miRN21

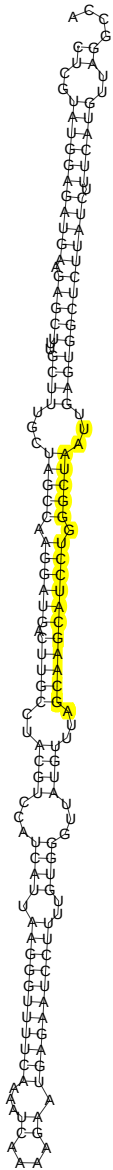


Secondary structure for miRN22

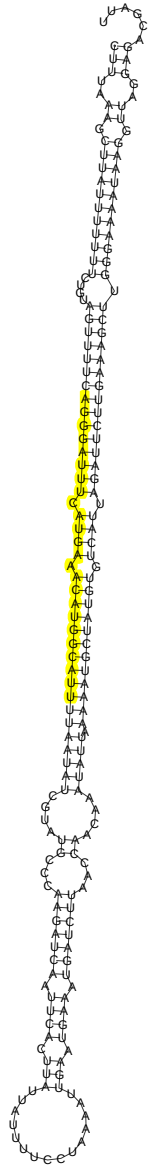
Secondary structure for miRN23



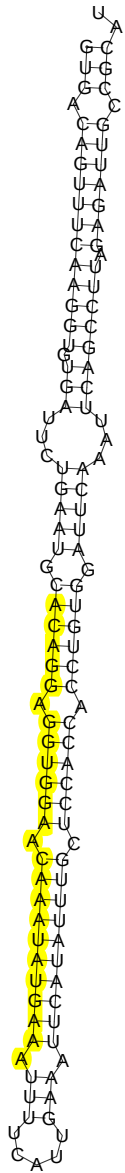
Secondary structure for miRN24



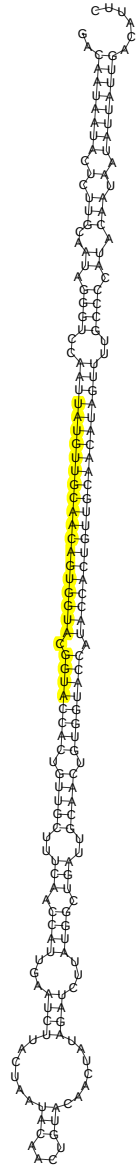
Secondary structure for miRN25



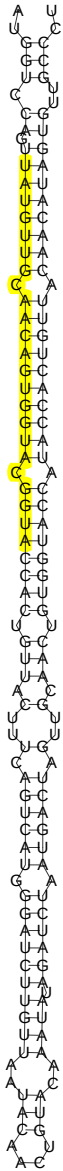
Secondary structure for miRN26



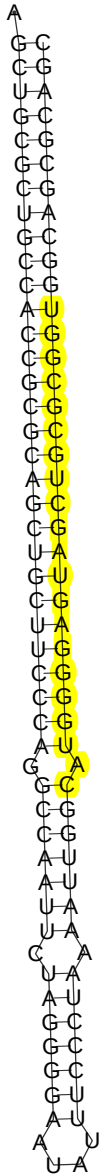
Secondary structure I for miRN27



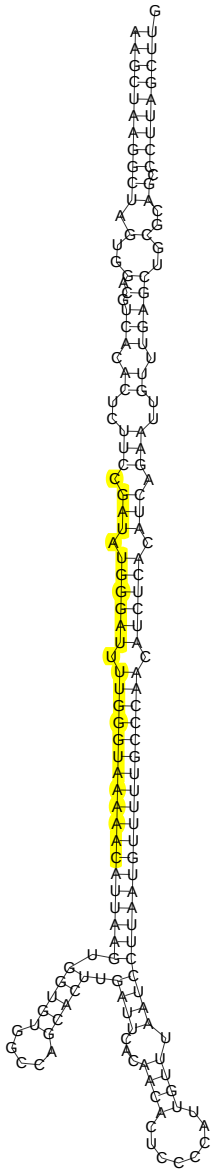
Secondary structure II for miRN27



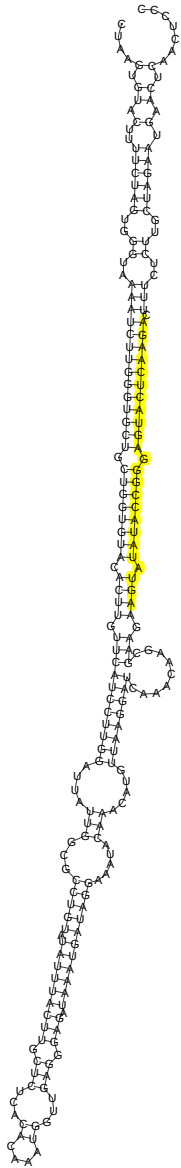
Secondary structure for miRN28



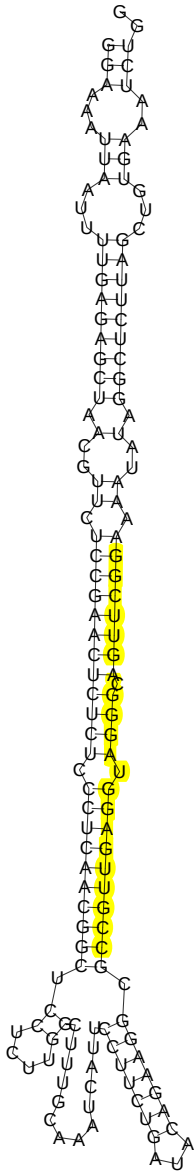
Secondary structure for miRN29



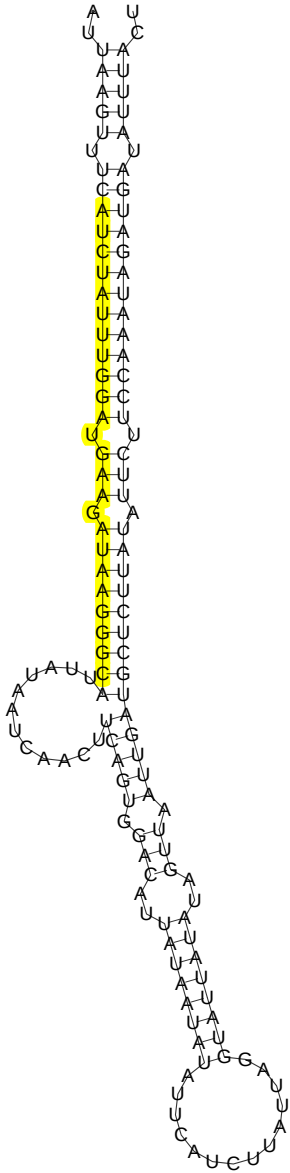
Secondary structure for miRN30



Secondary structure for miRN31

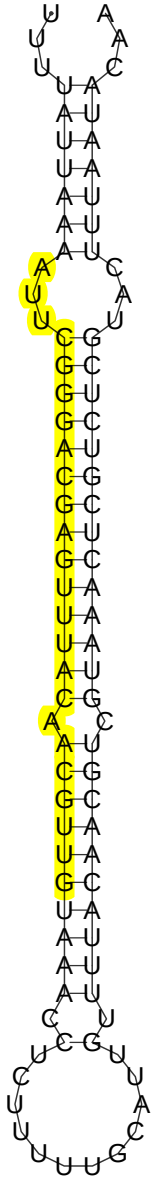


Secondary structure for miRN32

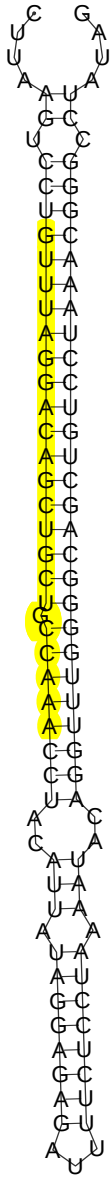


Secondary structure for miRN33

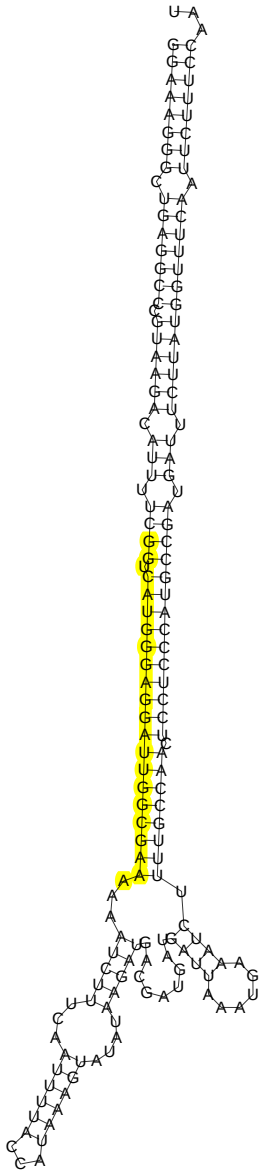
Secondary structure for miRN34



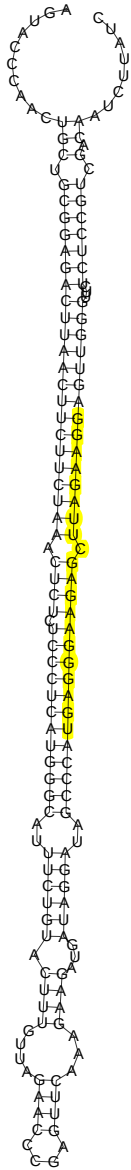
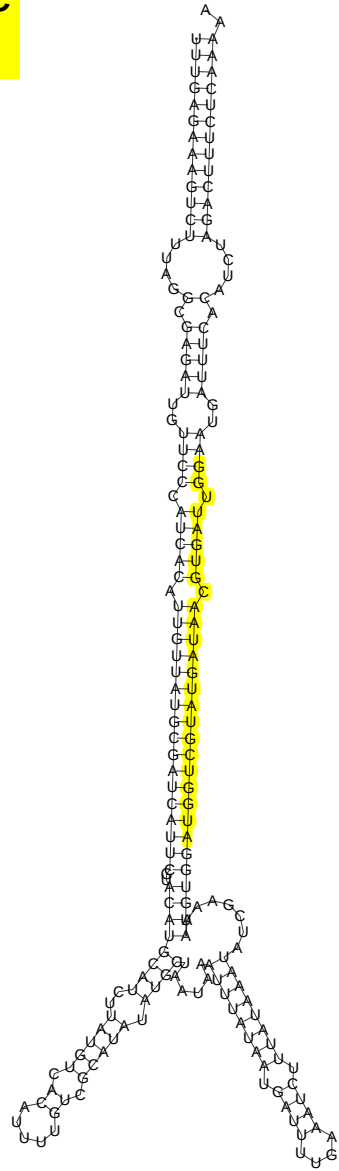
Secondary structure for miRN35



Secondary structure for miRN36



Secondary structure for miRN37



Secondary structure for miRN38