

Supplementary Figure 2. Predicted fold-back structures of the miR390 from *Arabidopsis* and *Populus*.

Arabidopsis thaliana

aagctcaggagggatagcgcc

```

AGAUUGAGU   G   AU   AA   G   .-U C
AGUA AGAA   AGCUAU   AGCUCAGGA   GGAUAGCGCCA   GG U
UCGU UCUU   UCGAUA   UUGAGUCCU   CCUAUCGCGGU   CC C
-----   -   CU   CC   A   \ - A

```

aagctcaggagggatagcgcc

```

CAAAAAACAAA-   --   AU U A   G   -----   UC
GUAG   AGAAGA   C GU   AAGCUCAGGA   GGAUAGCGCCA   UGAUGA   A
CAUC   UCUUCU   G UA   UUUGAGUCCU   CCUAUCGCGGU   AUUGCU   C
CCGGAAAAAGUAA   AU   CG U C   A   UUUUUUUCU   UA

```

aaactcaggatggatagcgcc

```

--   UUUU---   UU   UA   CCAA   A   U   AAAAAUA   A G
CGGCCU   CA   GUAG   AGAAGAG   UGAA   CUCAGGA   GGAUAGCGCCA   GAU AC A
GUUGGG   GU   CAUC   UCUUCUU   AUUU   GAGUCCU   CCUAUCGCGGU   CUA UG A
GU   UUUUUUU   UU   --   AGAC   C   C   ACUA---   G U

```

Populus trichocarpa

aagctcaggagggatagcgcc

```

UGAUAUGUGCAUA   U   UA   G   AUGA   A -   GUU A   UU
AGUA GGGAGGAUCUGU   AGCUCAGGA   GGAUAGCGCC   GCUGAUGAU AG UUGAU   UG UGGG \
UCGU UCCUCUUGGAUA   UUGAGUCCU   UCUAUCGCGG   UGAUUACUG UC AACUA   AC ACUC A
UUA-----   -   UC   A   ----   A U   AU- A   UA

```

aagctcaggagggatagcgcc

```

CUUGAUAUAUAGA   U   U U   G   - A--   GAU--   UG- CU
AGUA GGAAGAAUC GU   AAGCUCAGGA   GGAUAGCGCC   CU AG   AACCA   GG C
UCGU UCUUCUUGG   CA   UUUGAGUCCU   CCUAUCGCGG   GA UC   UUGGU   UU U
CA-----   -   U U   A   U CUA   AGUUU   UUA UU

```

aagctcaggagggatagcgcc

```

G--   UA   G   GAGC   AAAGUCUA---   U   UU
GGAGAAUCUGU   AGCUCAGGA   GGAUAGCGCCAU   AUGAC   UGUU GAG \
CCUCUUGGGUA   UUGAGUCCU   UCUAUCGCGGUG   UACUG   ACAA CUC A
AUU   UC   A   AC--   ACCUAACUAAA   -   UA

```

aagctcaggagggatagcgcc

```

AUAGAAA   U   UCU U   G   - A   AAU-----   CU
AGUA GGAAGAA   GU   AAGCUCAGGA   GGAUAGCGCC   CU AGGAU   CAUGGG \
UCGU UCUUCUU   UA   UUUGAGUCCU   CCUAUCGCGG   GA UCUUA   GUAUUU C
ACCA---   -   CGU C   A   U C   GUUUUUUGGU   UU

```

aaactcaggatggatagcgcc

```
AA--      CCA A A      U      A UA CAAA AAUAAAA
GAAGAA   GU AA CUCAGGA GGAUAGCGCC CUGA GU AACCA \
CUUCUU   CA UU GAGUCCU CCUAUCGCGG GAUU UA UUGGU A
AUAC     AGA A C      C      - CC ---- ACCCGAG
```

aaactcaggatggatagcgcc

```
GGAGCU   GCAA      GCAAUG A      U      A --- AAAACCACAU
GGUA     GAAGAA      AA CUCAGGA GGAUAGCGCC CUGAG AAUCA A
UCAU     CUUCUU      UU GAGUCCU CCUAUCGCGG GAUUC UUAGU A
U----- AC--      AGACAA C      C      - CUA ACCCGAGAAA
```