

Table S1. Two modified versions of *CAN1*

Names	Sequences
Strong F_{RNA}	ATGACAAATTCAAAA<u>GAAGACGCCGACATAGAGGAGAAGCATATGTACAATGAGCCGGTCACAACCCTATTTACGACGTGGAAGCGTCGCAAACGCAACCACAGAC</u>GC GGTTCTATACCATTGAAAAGATGAGAAAAGTAAAGAATTGTATCCATTGCGTTCCTTCCCGACGAGAGTCAATGGGGAGGATACGTTCTCAATGGAGGATGGCATAGGTGATGAAGATGAAGGAGAAGTTCAGAACGCTGAAGTGAAGAGAGAGCTTAAGCAAAGACATATTGGTATGATTGCCCTTGGGGGCACTATTGGGACCGGTCTTTTCATTGGTTTATCCACACCACTGACCAACGCCGGCCAGTGGGCGCTCTGATATCATATTTATTTATGGGTCTTTGGCATATTCGGTCACGCAGTCTTTGGGAGAAATGGCCACATTCATCCCTGTTACATCCTCGTTACAGTTTTCTCCCAAAGATTCCTGTGCGCCAGCATTTGGTGCGGCCAATGGTTACATGTATTGGTTTTCTTGGGCAATCACTTTTGCCCTGGAACATAAGTGTAGTTGGCCAAGTGATTCAATTTTGGACGTACAAAGTACCCCTGGCGGCCTGGATTAGTATTTTTTGGGTATTATCACCATAATGAACCTGTTCCCGTGAAATATTACGGGGAATTCGAGTTCTGGGTCGCTTCTATCAAAGTTTTAGCCATTATCGGGTTTTCTAATACTGTTTTTGTATGGTTTGTGGGGCCGGGGTTACCGGCCCGTGGGATTCCGTTATTGGAGAAACCCAGGTGCCTGGGGTCCAGGTATAATATCTAAGGATAAAAAC<u>GAAGGGAGGTTCTTAGGTTGGGTCTCTTCGTTGATTAAACGCTGCCTTCACCTTTCAAGGTACTGAACTAGTTGGTATCACGGCTGGTGAAGCCGCGAACCCAGAAAATCCG</u>TTCCGAGAGCCATCAAAAAGTGGTGTTCCGTATCTTAACCTTCTACATTGGCTCTCTATTATTCATTGGACTTTTAGTCCCATAACAATGACCCTAACTGACACAATCTACTTCGTACGTGTCTACTTCTCCCTTTATTATTGCTATTGAGAACTCTGGGACGAAGGTGTTGCCACATATCTTCAACGCTGTTATCTTAACAACCATTATTTTCGGCCGCCAATTCAAATATTTACGTTGGTTCCCGGATTTTATTTGGTCTATCAAAGAACAAGTTGGCGCCGAAATTCCTGTCAAGGACCACCAAAGGTGGGGTGCCATACATTGCAGTTTTTCGTTACTGCTGCATTTGGCGCTTTGGCGTACATGGAGACTTCGACTGGTGGTGACAAAGTCTTCGAA TGGCTATTAAATATCACCGGTGTGGCCGGTTTTTTTGCATGGTTATTTATCTCAATCTCGCACATCAGATTTATGCAAGCTTTGAAATACCGTGGTATCTCGCGTGACGAGTTACCATTTAAAGCTAAATTAATGCCTGGTTTGGCTTATTATGCGGCCACCTTTATGACGATCATTATCATTATTCAAGGGTTCACGGCTTTTGCGCCAAAATTCAATGGCGTTAGCTTTGCAGCCGCATATATCTCTATTTTCCTATTCTTAGCCGTTTGGATCTTATTTCAATGCATATTCAGATGCAGATTTATTTGGAAGATTGGAGATGTCGACATCGATTCCGATAGAAGAGACATTGAGGCAATTGTATGGGAAGATCATGAACCAAAGACTTTTTTGGGACAAATTTTGAATGTTGTAGCATAG
Weak F_{RNA}	ATGACAAATTCAAAA<u>GAAGACGCCGACATAGAGGAGAAGCATATGTACAATGAGCCGGTCACAACCCTATTTACGACGTGGAAGCATCCCAAACCCACCACAGAC</u>GAGGATCGATACCCTTGAAAAGATGAGAAAAGTAAAGAATTGTATCCATTGCGATCATTCCCGACAAGAGTAAATGGCGAGGATACTTTCTCTATGGAGGATGGAATAGGTGATGAAGATGAAGGAGAAGTACAGAACGCAGAAGTAAAGAGAGAGCTGAAGCAAAGACATATTGGTATGATTGCCCTTGGTGGTACAATTGGAACAGGTCTTTTCATTGGTTTATCCACCCCCCTCACAAACGCTGGCCCAAGTGGGCGCTCTTATATCATATTTATTTATGGGTCTTTGGCATATTCAGTCACGCAGTCCTTGGGTGAAATGGCTACATTCATCCCTGTTACATCCTCTTTACAGTTTTCTCACAAAGATTCCTTTCTCCAGCATTTGGCGCTGCTAATGGTTACATGTATTGGTTTTCTTGGGCTATCACTTTTGCGCTTGAACCTAGTGTAGTTGGACAAGTCATTCAATTTTGGACGTACAAAGTTCCTCGCTGCGTGGATTAGTATTTTTTGGGTATTATCACAATAATGAACCTGTTCCCTGTCAAATATTACGGAGAATTCGAGTTCTGGGTCGCTTCTATCAAAGTATTAGCTATTATCGGGTTTTCTTATATACTGTTTTTGTATGGTTTGTGGTGCTGGGGTACTGGTCCAGTTGGATTCCGTTATTGGAGAAACCCAGGAGCATGGGGT

CCAGGTATAATATCTAAGGATAAAAAACGAAGGTAGGTTCTTAGGTTGGGTGTCCTCTTTGATTAACGCTGCATTACATTTCAAGGTACA
GAACTAGTAGGTATCACTGCCGGCGAAGCTGCAAACCCAGAAAATCCGTACCAAGAGCGATCAAAAAAGTCGTATTCCGTATCTTAACC
TTCTACATTGGCTCTCTATTATTCATTGGACTTTTAGTTCTTACAATGACCCTAAACTAACACAATCAACTTCCTACGTTTCTACTTCC
CCTTTTATTATTGCTATTGAGAACTCTGGTACAAAGGTTTTGCCACATATCTTCAACGCTGTCATCTTAACCACCATTATTTCTGCCGCT
AATTCTAATATTTACGTCGGTTCCCGTATTTTATTTGGTCTCTCAAAGAACAAGTTGGCTCCTAAATTCCTGTCAAGGACTACAAAAGGA
GGTGTTCATACATTGCTGTTTTCGTTACTGCTGCATTTGGCGCTTTGGCTTACATGGAGACATCAACAGGAGGTGACAAAGTTTTTCGAA
TGGCTATTAAATATCACTGGAGTAGCAGGTTTTTTTTGCATGGTTATTTATCTCAATCTCGCACATCAGATTTATGCAAGCGTTGAAATAC
CGTGGAATCTCTCGCGACGAGTTACCCTTTAAAGCTAAATTAATGCCCGGCTTGGCCTATTATGCTGCCACATTTATGACTATCATTATC
ATTATTCAAGGATTCACCGCCTTTGCACCAAATTCAATGGAGTTAGCTTTGCTGCCGCCTATATCTCTATTTTCTTTTCTTAGCCGTT
TGGATCTTATTTCAATGCATATTCAGATGCAGATTTATTTGGAAGATTGGAGATGTCGACATCGATTCCGATAGAAGAGACATTGAGGCA
ATTGTATGGGAAGATCATGAACCAAAGACTTTTTGGGACAAATTTTGGAATGTTGTAGCATAG

The underlined regions are the segments probed for R-loop formation in Figure 2B.