Sequences of 3' ends of gadX transcripts determined by 3' RACE.

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JAO83      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO82      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO84      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO87      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO89      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO109     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO110     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO111     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO112     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO86      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGGCCGTTCTGCGGAAGGA
JAO85      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO88      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO107     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO127     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO81      TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO102     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO124     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA
JAO106     TCGGCGGCAAGTATTGTTGCGCAAGGGAATTTTTACGGCACTGACCGTTCTGCGGAAGGA

JAO83      ATAAGATTATAGAGTTTTACTC-------------------------------------
JAO82      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO84      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO87      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO89      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO109     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO110     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO111     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO112     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO86      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO85      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO88      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO107     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO127     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO81      ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO102     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO124     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG
JAO106     ATAAGATTATAGAGTTTTACTCAGACATAAAAAAACCCGGCATAGGGGACCGGGAAGAG

JAO83      ------------------------------------
JAO82      ------------------------------------
JAO84      ------------------------------------
JAO87      ------------------------------------
JAO89      ------------------------------------
JAO109     ------------------------------------
JAO110     ------------------------------------
JAO111     ------------------------------------
JAO112     ------------------------------------
JAO86      GA----------------------------------
JAO85      GATAGT------------------------------
JAO88      GATAGT------------------------------
JAO107     GATAGT------------------------------
JAO127     GATAGT------------------------------
JAO81      GATAGTCTGCCGTCTCCAGACTAATAAAC------
JAO102     GATAGTCTGCCGTCTCCAGACTAATAAACC-----
JAO124     GATAGTCTGCCGTCTCCAGACTAATAAACC-----
JAO106     GATAGTCTGCCGTCTCCAGACTAATAAACCGTTAT
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Sequences of 3' ends of gadX transcripts determined by 3' RACE.

3' RACE was used to determine the 3' end of the *gadX* mRNA. Amplified cDNA fragments were T/A cloned into vector pCR2.1 TOPO. Plasmid clones were isolated and sequenced with either primer GadX-S1 or GadX-S2. 18 representative RACE clones are displayed as a multiple sequence alignment. The stop codon of *gadX* is shown in the red box, The region of overlap between the *gadX* mRNA and the GadY small RNA is represented by the blue box.