

**Additional file 2.** Ligation substrates tested to detect DNA ligation activity of the DRB0100 gene product

<b><i>Ligation substrates prepared by annealing of the following oligonucleotides (* indicates <sup>32</sup>P label)</i></b>
5'-*CCUGCAACAGUGCCACGCUGAGAGC-3'
5'-CCUGCAACAGUGCCACGCUGAGAGC-3' 5'-*CAGCAGCAAUGAAAAAUC-3'
5'-AGATTTTTCATTTGCTGCTGGCTCTCAGCGTGGCACTGTTGCAGGC-3'
5'-CCTGCAACAGTGCCACGCTGAGAGC-3' 5'-*CAGCAGCAAUGAAAAAUC-3'
5'-AGATTTTTCATTTGCTGCTGGCTCTCAGCGTGGCACTGTTGCAGGC-3'
5'-CCUGCAACAGUGCCACGCUGAGAGC-3' 5'-*CAGCAGCAAATGAAAAATC-3'
5'-AGATTTTTCATTTGCTGCTGGCTCTCAGCGTGGCACTGTTGCAGGC-3'
5'-*CTAGGTTAGCATGACCGCTG-3'
5'-GTCATGCTAACCTAGCAGCG-3'

Ligation substrates tested to detect DNA ligation activity of the DRB0100 gene product. In addition, various blunt-ended DNA substrates have been tested. The substrates have also been used for electromobility shift experiments, but no binding of the DRB0100 gene was detectable.