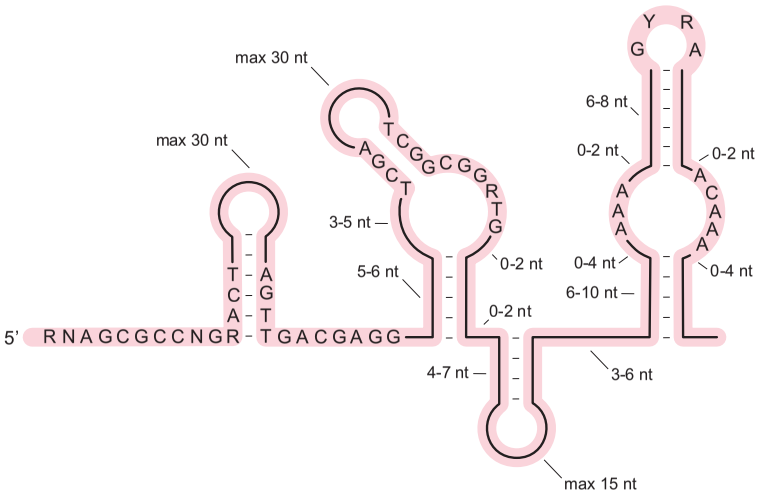
A



B

Accession	Metagenome	Start position	End position	Regulated function (COG)
AAFX01006262	Soil	175	26	End of DNA fragment
AAFZ01014893	Whale2	396	229	COG0449

C

```
Structure
AAFX01006262  ATAGCGCCAGGACCCGGATCGA--------------GGCTTTCGGGTTGACGAGGTGGGGATTTATCGAATCATTCGGCGGATG
AAFZ01014893  GAAGCGCCAGGACTGGTTGTGATTCGGGTACTATCCCGATGACCAGTTGACGAGGAGAGGGCTTATCGAAGCATTCGGCGGATG

Structure
AAFX01006262  ATCCCCCGGCCGC---ACAGTCGTGATGATGCGCTCAAACCGATTTGGCAACAGATCG-ACAAATGCTCGTCAGCGTGCACATG
AAFZ01014893  GCTCTCCGGCCTGACCGGGGTCGTAACAGCACCGACAAAGTCTGCGGGTGACCGTAGAGACAAAGCGGTGTCGAATCGGTATCT
```

Additional file 18: (A) GLMS riboswitch pattern. (B) List of identified GLMS riboswitches. (C) Alignment of GLMS riboswitch sequences.