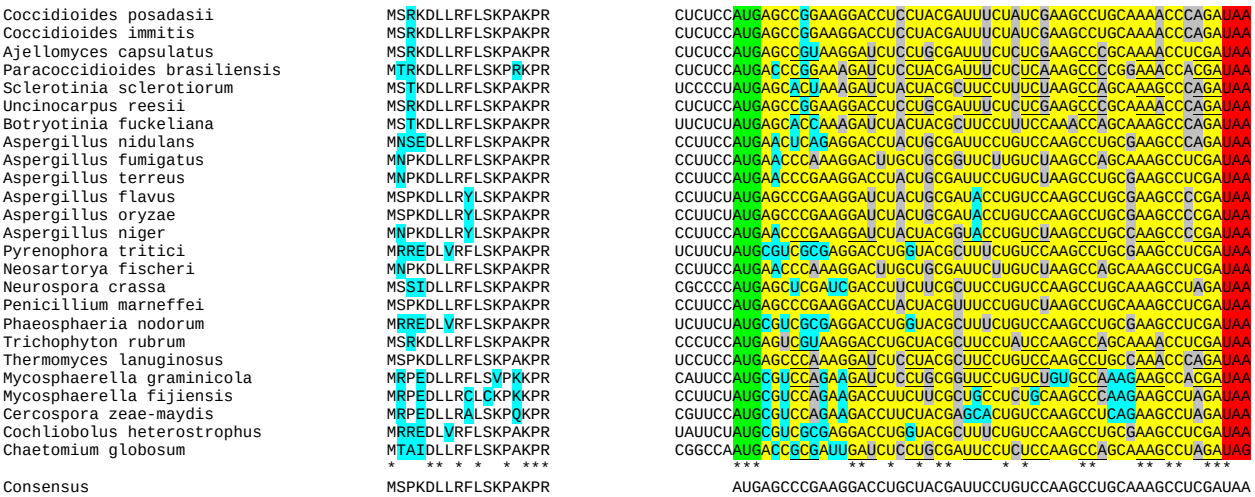
Supplemental Data

Supplementary Figure 1. Previously unpublished conserved uORF sequences in the mRNA of AdoMetDC genes from eukaryotes. The full species names are given on the left. The corresponding peptide sequence is shown in the middle in single letter code. The RNA sequence is on the right-hand side. The consensus sequence in each case is given below the alignment. Non-synonymous changes are highlighted in light blue, synonymous changes in the RNA sequences are highlighted in gray. Absolutely conserved residues are indicated by "*" below each alignment. The initiation codon is highlighted in green and the termination in red. A) The conserved uORF in the 5 leader of AdoMetDC in Pezizomycotina. B) The conserved uORF in the 5 leader of AdoMetDC in nematodes.

Supplementary Figure 1

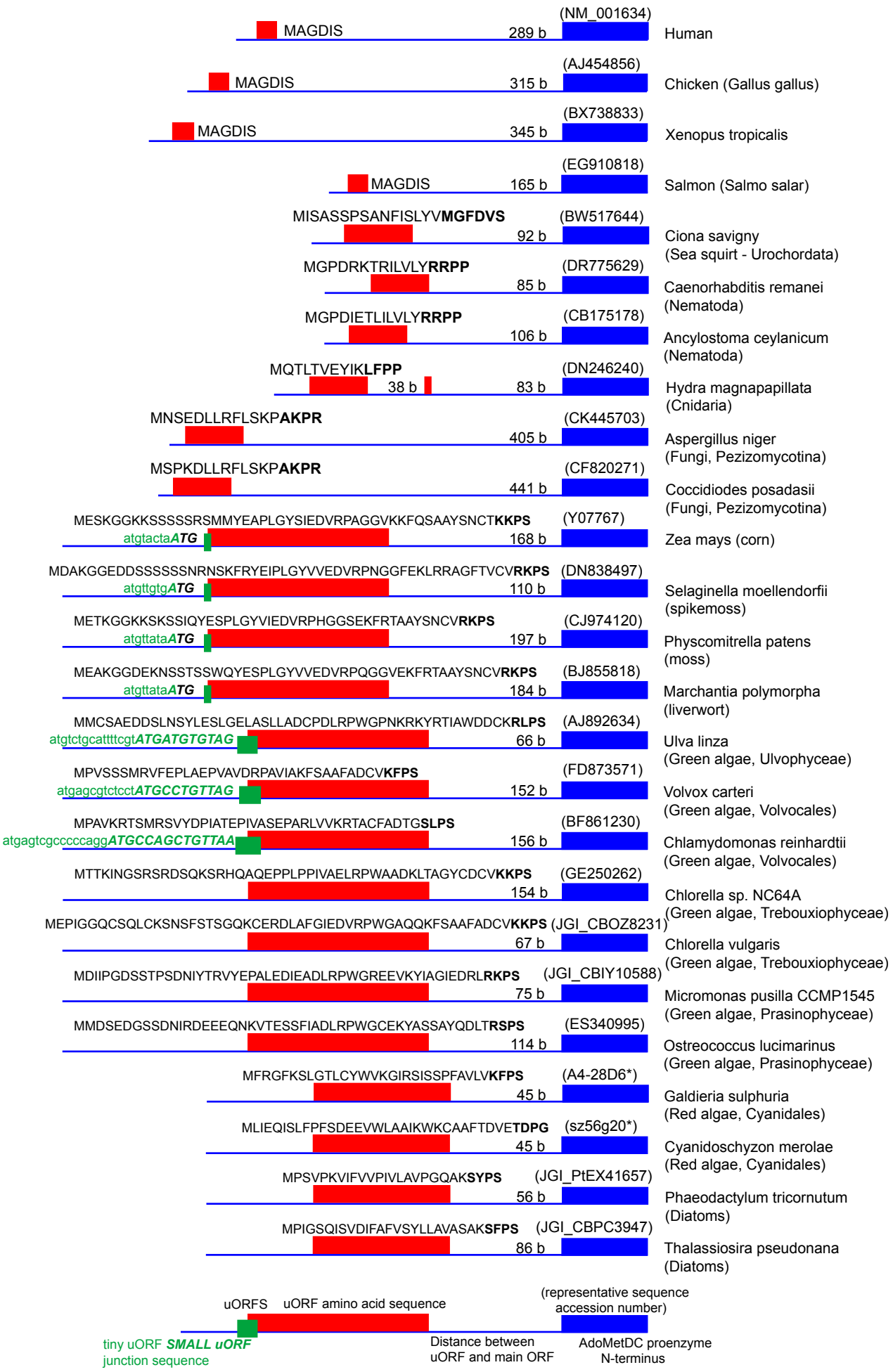
A.



B.

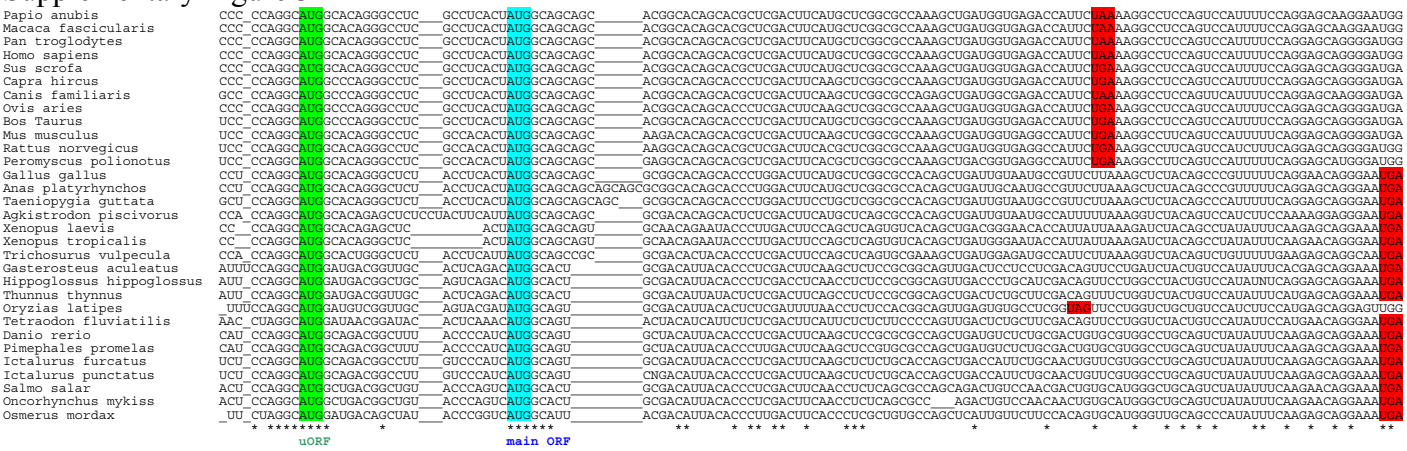
Supplementary Figure 2. Schematic representation of the 5' leaders of AdoMetDC mRNAs with conserved uORFs. uORFs are shown as rectangular red boxes. Their amino acid sequences are indicated above each box. The "tiny" uORFs in plants are shown rectangular green boxes. Their nucleotide sequences are shown in front. The beginning of the main ORFs are shown as rectangular blue boxes. Species names are given on the right. "b" = bases

Suppementary Figure 2



Supplementary Figure 3. The nucleotide sequences of SpmSyn mRNAs surrounding the newly described uORFs in vertebrates. The full species names are given on the left. Absolutely conserved nucleotides are indicated by "*" below the alignment. The initiation codon of the uORF is highlighted in green and the termination codon in red. The initiation codon of the main ORF is highlighted in light blue.

Supplementary Figure 3



Supplementary Figure 4. Schematic representation of the newly described uORFs in vertebrate SSAT mRNAs. The discrete “uORF1” is shown as rectangular red box. The overlapping “uORF2” shown as rectangular yellow box. The main ORF is shown as rectangular blue box. “b” = bases; “a.a” = “amino acids”

Supplementary Figure 4