

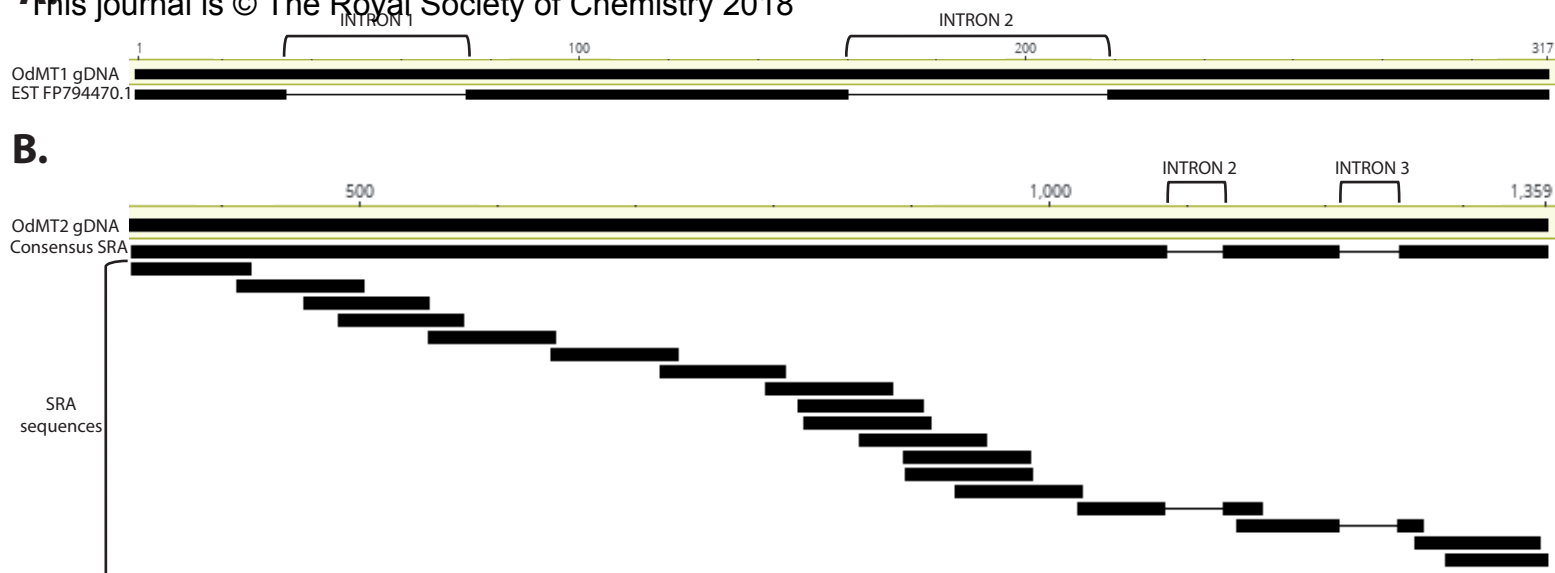


Figure S1. Annotation of *OdMT1* and *OdMT2* genes were supported by EST and SRA sequences. **(A)** *OdMT1* gene was annotated as ‘GSOIDP00013076001-unnamed product’ in the Oikobase, scaffold_50 from 61,593 nt to 61,997 nt (plus strand). Comparison of the genomic sequence (top line) with the EST FP794470.1 (bottom line) supported the annotated 3 exons / 2 introns structure. **(B)** *OdMT2* gene was not annotated in the Oikobase, scaffold_16: from 829,667 nt to 831,025 nt (minus strand). *OdMT2* gene structure was deduced by comparison of the genomic sequence (top line) with a consensus cDNA (bottom line) reconstructed from 18 SRA sequences (short lines; **Table S1**) covering 75% of the gene, from position 335 (exon 2) to 1359 (exon 4). Exon 1 and the 5’ end of exon 2 were deduced by comparison with *OdMT1* and manual inspection of the ORFs.

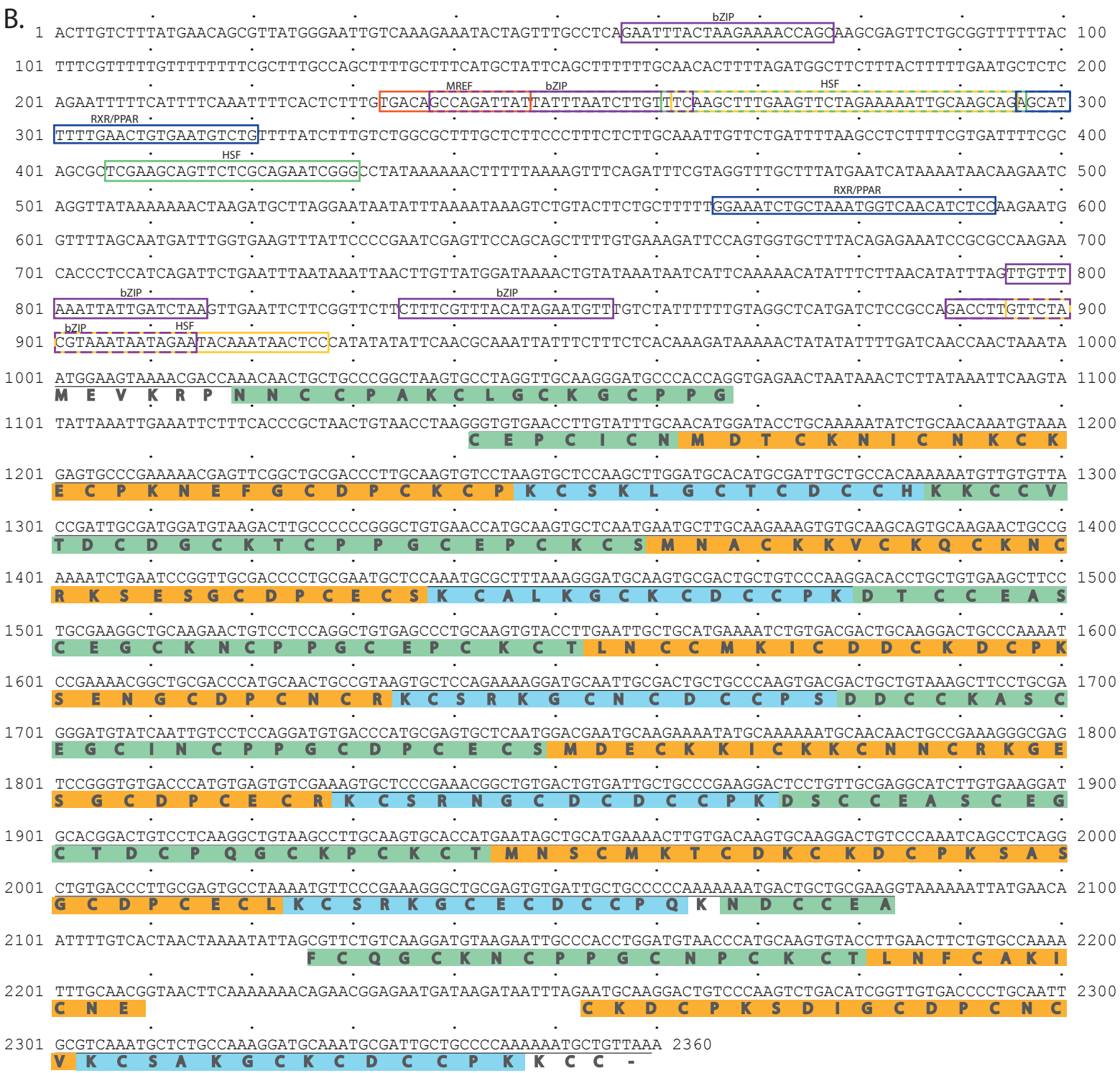
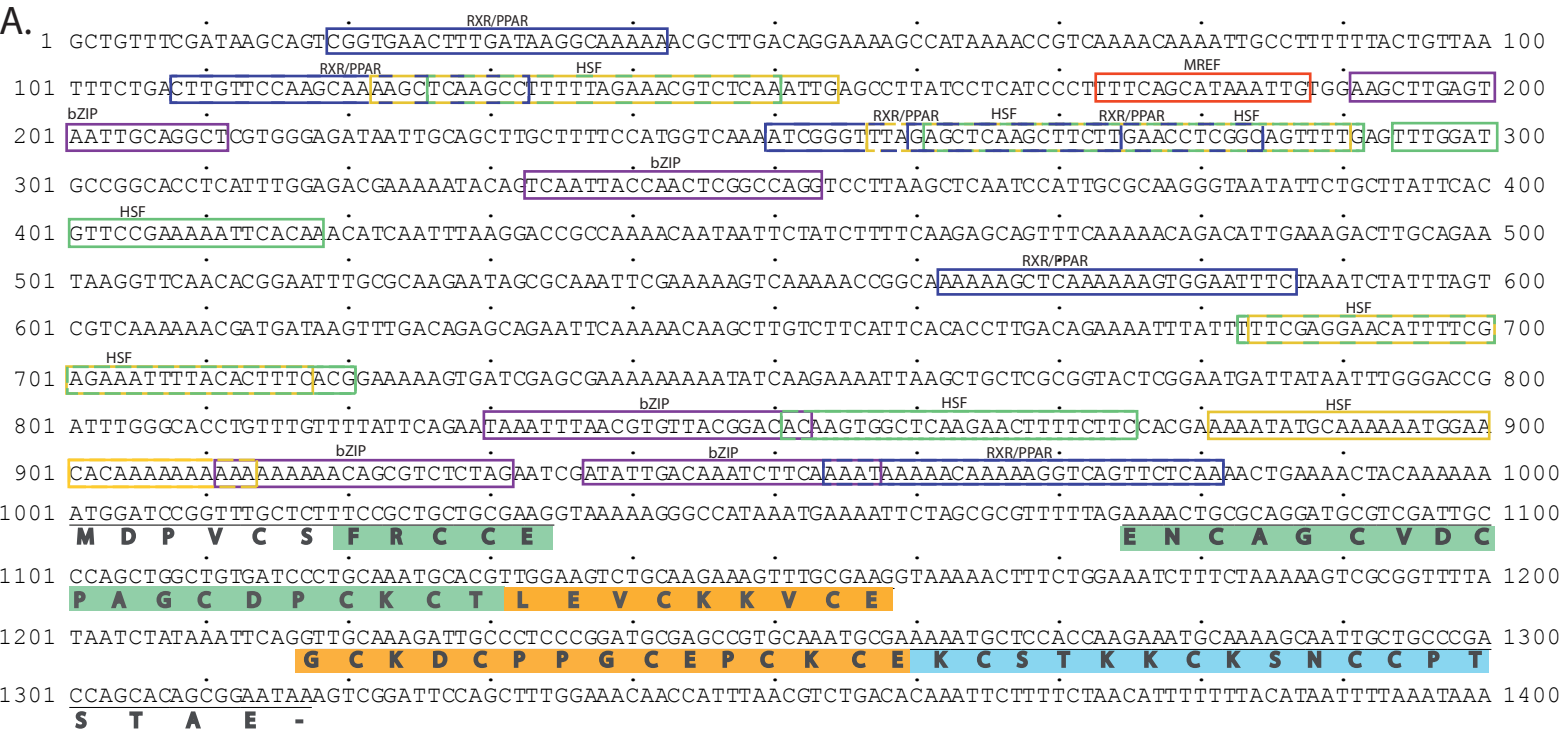


Figure S2. *OdMTs* genomic regions. **(A)** Genomic region of *OdMT1* gene along with 1 Kb of the 5' flanking promoter region and *in silico* translation of CDS. Deduced *OdMT1* protein is made of a single repeat unit (RU) with an internal repeat –C7a (green background) and C7b (orange background)– and a C-terminal tail (blue background). **(B)** Genomic region of *OdMT2* gene along with 1 Kb of the 5' flanking promoter region and *in silico* translation of CDS. Deduced *OdMT2* protein is made of 6 RUs, each one with the same C7a/C7b/C-tail structure (green, blue and orange backgrounds, respectively). Putative binding sites for transcription factors in the promoter regions of both genes are depicted with the same colour code than in Figure 2: MREF (orange boxes), bZIP transcription factors (purple boxes), RXR/PPAR (blue boxes) and animal or yeast HSF (green and yellow boxes, respectively). Notice that some boxes overlap (see **Table S3** for additional details).

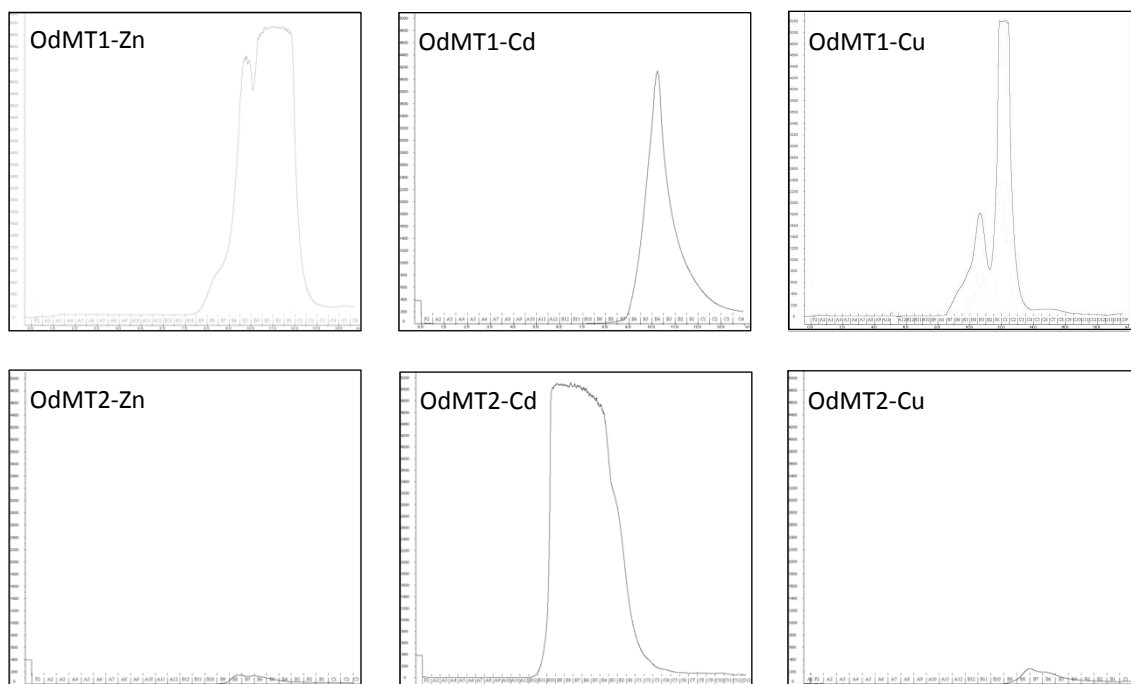


Figure S3. FPLC elution profiles at 254 nm of recombinant metal-OdMT1 (top panels) and metal-OdMT2 (low panels) complexes with Zn, Cd and Cu. Notice that whereas metal-OdMT1 complexes were obtained from *E. coli* cultures grown in medium supplemented with Zn, Cd or Cu, metal-OdMT2 complexes were only obtained from cultures grown in Cd-enriched media (central low panel). The intensity range was kept at the same values for better comparison among the chromatograms.