



**Figure S5: MYB21 SELEX (systematic evolution of ligands by exponential enrichment) experiment.** *MYB21* cDNA was cloned into the expression vector pDEST17 (Invitrogen), the *MYB21* recombinant protein was produced in *Escherichia coli* (BL21) and purified using the Ni-NTA agarose kit (Qiagen) according to manufacturer recommendations. PCR SELEX was carried out as follow: purified *MYB21* was incubated with a mix of random primers (5' - TCGACTCGAGTCGACATCGNNNNNNNNNNNNNNNNNNNGGATCCTGCAAATTCGCG-3') and immunoprecipitated (IP) with nProtein A Sepharose™ 4 Fast Flow (GE healthcare) according to manufacturers instructions using the low salt buffer and Anti-His 6 -Peroxidase (Roche Life Science). DNA fragments were amplified following IP with the following forward and reverse primers: 5'-CGCGAATTTGCAGGATCC-3' and 5'-TCGACTCGAGTCGACATCG-3'. After six cycles of PCR SELEX, DNA fragments were cloned and sequenced. (A) Sequence alignment of 22 DNA fragments bound to *MYB21* identified after sequencing. Aligned sequences are centred on the consensus MYB core DNA motif, *[C/T]NGTT[A/G]*. (B) Logo generated from the 21 DNA motifs. (C) Logo generated from the DNA motifs that were similar to the MYB-core type I sequence: *CNGTT[A/G]*. (D) Logo generated from the DNA motifs that were similar to the MYB-core type II sequence: *TNGTT[A/G]*.