Addition file 1. Structure of R. toruloides DAO1 gene. Nucleotide positions are defined from the translation start codon “ATG” (in which the position of “A” is +1). Protein positions are labeled with the prefix “P”. The translational start codon within NcoI site (CCATGG) in the intron 1-containing promoters are and the ATG to ATC mutation are boxed. Exons are shown in capital letters and introns are in lowercase italics; the putative CAAT box is highlighted in grey; DRE1, box and IES1 are indicated with shaded text. The putative coenzyme binding consensus sequence (GXGXXG, where “X” is any amino acid) is underlined; the dimerization loop is double underlined; the amino acid residues H-bonded to the flavin O-2 atom (YQ) coenzyme binding consensus sequence (GXGXXG, where “X” is any amino acid) is underlined; the CAAT box is highlighted in grey; DRE1, ATC mutation are boxed. Exons are shown in capital lett ers and introns are in lowercase italics; the putative translational start codon “ATG” (in which the position of “A” is +1). Protein positions are labeled with the prefix “P”. The bold and italics;
-carboxy and -amino groups of the substrate (Y_{223}, Y_{238} and R_{285}) are boxed and highlighted in grey; the C-terminus peroxisomal targeting signal (SKL) is highlighted in grey. Abbreviations: ct box: pyrimidine-rich region; tsp: transcriptional start point; PolyA site: polyadenylation site.