

Supplementary Table S1 Primer Sequences

Primer name	Sequence
Primers for the amplification of <i>P. pastoris</i> promoters	
P _{GAP_fw}	5'-AACCGGGCCCAGATCTTTTTGTAGAAATGT-3'
P _{GAP_back}	5'-CATGGCCTGCAGGTGATAGTTGTTCAATTGATTGAAATAGGGACAAAT-3'
P _{G1_fw}	5'-GATAGGGCCCCAAACATTTGCTCCCCCTAGTCTC-3'
P _{G1_back}	5'-GATACCTGCAGGAAGGGTGAATTTTAAGGATCTTTTAT-3'
P _{G2_fw}	5'-GATAGGGCCCAATACCTTCGTAACATATT-3'
P _{G2_back}	5'-GATACCTGCAGGGTTTACTCGTATATAGAATGGTAGGTTCAAT-3'
P _{G3_fw}	5'-GATAGGGCCCCAGCAATCCAGTAACCTTTTCTGAAT-3'
P _{G3_back}	5'-GATACCTGCAGGTTGAGTTCAATAAATTGTCCGGGA-3'
P _{G4_fw}	5'-GATAGGGCCCTGGACTGTTCAATTTGAAGTCGATG-3'
P _{G4_back}	5'-GATACCTGCAGGGGATAAAGGTAAGGGAAAAAAGCAA-3'
P _{G5_fw}	5'-GATAGGGCCCCATTCAAGTGGACTGCTAAATGCTTTA-3'
P _{G5_back}	5'-GATACCTGCAGGTTTTCAAAAAATGGCCACACA-3'
P _{G6_fw}	5'-GATAGGGCCCAGACCAGCAGTTTAAGTACGCAAAATC-3'
P _{G6_back}	5'-GATACCTGCAGGCTTTTCTTTGGGCAAGGAAAAATC-3'
Primers for real-time PCR	
PpACT1_Up	5'-CCTGAGGCTTTGTTCCACCCATCT-3'
PpACT1_Low	5'-GGAACATAGTAGTACCACCGGACATAACGA-3'
PpeGFP_Up	5'-TCGCCGACCACTACCAGCAGAA-3'
PpeGFP_Low	5'-ACCATGTGATCGCGTTCTCGTT-3'
PpHSA_Up	5'-AAACCTAGGAAAAGTGGGCAGCAAATGT-3'
PpHSA_Low	5'-ACTCTGTCACTTACTGGCGTTTTCTCATG-3'
HC_up	5'-TACTGCTGCTTTGGGTTGTTTGGT-3'
HC_low	5'-AAGGGACAGTAACAACAGAGGACA-3'
LC_up	5'-GATGAACAATTGAAGTCTGGTAC-3'
LC_low	5'-GAGTAACTTCACAAGCGTAAACC-3'
CpB_up	5'-GCTGGAGGTTCTGATGATTGGGCTTACGAC-3'
CpB_low	5'-TGAATCTGGGACTCTGGCAAAATGAAACC-3'
Primers for the generation of the G1 knock out cassettes	
G1KO A bw	5'-GGAGTAGAAACATTTTGAAGCTATGGTCCAGACCACCGTATTATCCGTAAT-3'
G1KO B fw	5'-ATTACGGATAATACGGTGGTCTGGACCATAGCTTCAAAATGTTTCTACTCC-3'
G1KO B bw	5'-CTGCTCGCCGATCTCGGTC-3'
G1KO C fw	5'-TGACCAGTGCCGTTCCGG-3'
G1KO C bw	5'-ACGGTTGAAGTAGTTTCTGTAATGATCC AATTAAAGCCTTCGAGCGTCCC -3'
G1KO D fw	5'-GGGACGCTCGAAGGCTTTAATT GGATCATTACAGAACTACTTCAACCGT -3'
G1KO D bw	5'-CGAATAGATAGGAACAGGCAATAACAC -3'