

Additional file 1

Article title:

Re-assessment of *YAPI* and *MCR1* contributions to inhibitor tolerance in robust engineered *Saccharomyces cerevisiae* fermenting undetoxified lignocellulosic hydrolysate

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Table S1. Oligonucleotides used during the study

Name	Sequence 5'----3'
YAP1-F	CTAGTGAATTCATGAGTGTGTCTACCGCCAAG
YAP1-R	TGATGAAGCTTTTAGTTCATATGCTTATTCAAAGCTAATTG
CassFor	CTAGTGCATGCAGTTTATCATTATCAATACTCGCCATTTC
CassRev	TGATGAGATCTGGCCGCAAATTAAGCCTTCG
GPD-YAP1-F	GCTAGTGACGTCGCATGCGGGAACAAAAGCTGGAGCTCAG
CYC1t-YAP1-R	GTAGACAGCTGGCTAGCGCGCGTAATACGACTCACTATAGG
HR1-F	AGTAGAGACGTCGACTGGAGCATCGAATCTGTAG
HR1-R	AGTAGAGCATGCGTTATCTTGTGTCCACTGGTAGC
HR2-F	AGTAGAGCTAGCGGAGAAGTCATATGACAGTGTG
HR2-R	AGTAGAGCGGCCGCGAATAGCGTATCTTCCGCATTG
attBP-F	TATTACGCGCGCTAGCGTGGTCGGCTGGAGATCGG
attBP-R	TGACTTCTCCGCTAGCAGCCGTTATGGCGGGCATC
Ver.ins1-F	CTTCAAGTCTCTTCCAGATGGCAGG
Ver.ins1-R	GTGGATGCCAGGAATAAACTGTTAC
Ver.ins2-F	CCTCGACATCATCTGCCAGATG
Ver.ins2-R	GTGGTGA ACTTCCCTTGCTTCTCTG
MCR1-F	AGACCCATCACATCGCATCAC
MCR1-R	GAATTAGAGCTTAAAGCCAAGCC
YLR446W Lox-F	TTCGAATTTCTTTAATCAAATCATCTATACGCAGGTCGACAACC CTTAAT
Lox-R	TCTAGCACTATAGATCTTCGTAAGCATCACCTAATAACTTCGTA TAGC
YLR446W TER-R	GTATGCTGGAGTAATATTTTATCTGCTCTAGCTGGAGGTAGACA AAGAC
YLR446W-F	AATCGGACGTCGTTTCAGAACATGACAATTGAAAGCACT

YLR446W R	GTTGCGACGTCTGATGAAATATATTATTGAACTGGTTGTC
Fw-APJ1-A2	AAGTAAAACACATTTTTCTTTTGCTACCAGTGGACACAAGATA ACGGAGAGTGGTCGGCTGGAGATCGG
Rv-APJ11-A1	AAAAAATAAAAATAGAAAATGTATAACATTACTGCATGACTAT ATAACCTAGCCGTTATGGCGGGCATC
Fw-APJ1-check	GAACGGTAGGTATTGATTGTA
Rv-APJ1-check	AACATATCGGTTCCACCGGT
Fw-A1-attP-tefpr	TTTGTGGTCGGCTGGAGATCGGGTAGTGCCCCAACTGGGGTAA CCTTTGAGTTCTCTCAGTTGGGGGCGTAGAGATCTGTTTAGCTT GCC
Rv-A2-attB-teft	TTTAGCCGTTATGGCGGGCATCGTGGAGTACGCGCCCGGGGAG CCCAAGGGCACGCCCTGGCACCCGCACCGCGGGATGGCGGGCGT TAGTATC
Fw-PstI-PhiC31	TTTTCTGCAGGGGTGTCTCGCTACGCCGCT
Rv-BamHI-PhiC31	TTTTGGATCCGGTCGACGAGCTCACTAGTC

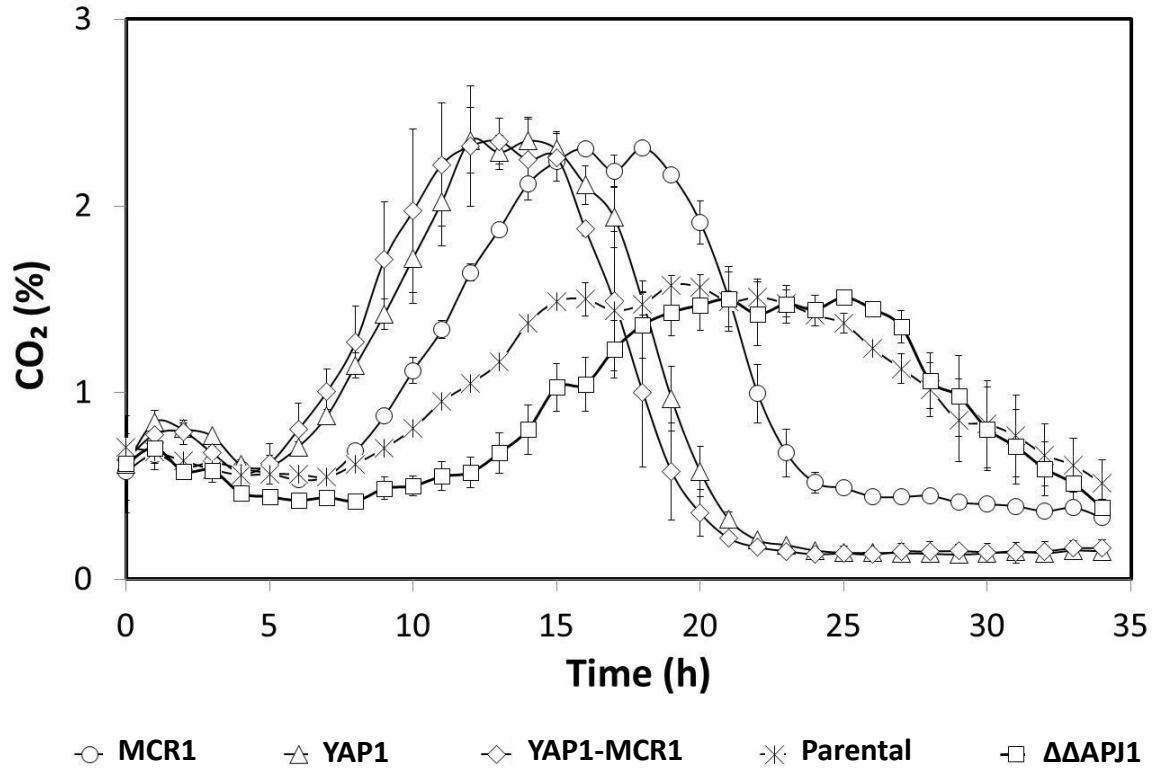


Figure S1. Carbon dioxide profile of the strains GSE16 (parental), GSE16-YAP1, GSE16-MCR1, GSE16-YAP1-MCR1 and GSE16- $\Delta\Delta$ APJ1 during anaerobic batch fermentations of spruce hydrolysate (only shown for the first 35h)