

Recombinant *Saccharomyces cerevisiae* strain development for rapid glucose and xylose co-fermentation

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Table S1. Primers used in this study

Primer	Description	Sequence (5'→3') ^{a,b}
Episomal plasmid		
pPYXp.pu	<i>PGK1</i> promoter (pPY1)	AGC <u>ACTAGT</u> TATTTTAGATTCCTGACTTCAAC
pPYXp.pd	<i>Orpinomyces</i> XI (pPYXo)	CCC <u>GAATTCT</u> GTTTTTATATTTGTTGTAAAAAG
Xlou	<i>Piromyces</i> XI (pPYXp)	TTAG <u>AATT</u> CAAAATGACAAAGGAATACTT CCCA
Xlod	<i>Piromyces</i> XI (pPYXpXp)	AATCTCGAGTTATTGGTACATAGCAACAA TTG
pPYXp.xu	<i>Orpinomyces</i> XI (pPYXoXo)	CCCGAATTCAAATGGCTAAGGAATATTT CCCAC
pPYXp.xd	URA3	ACGTCTAGATTATTGGTACATGGCAACAA TAGCT
PGK	NTS2-2 upstream partial(pNTS-1)	AATACTAGTTATTTTAGATTCCTGACTTCA AC
Cyc1TT	NTS2-2 downstream partial(pNTS-2)	TTAACTAGTGCAAATTAAAGCCTTCGAGC GTCCCA
pPYXpXo.pgku NaeI	pNTS	AAGCCGGCTATTTTAGATTCCTGAC
pPYXpXo.cyc1tt d	LoxP-KanMX- LoxP (XoNK)	AA <u>ACTAGT</u> CCGCAAATTAAAGCCTT
Integrating plasmid		
xpxpura3un	<i>Orpinomyces</i> XI (XoNK)	TTTGGATCCAGCTTTTCAATTCATCTTTT
xxura3dn	URA3-pNTS (XXUN)	ccttgaaactacctcGGGTAATAACTGATATAATT
xpxpnts2un	<i>Piromyces</i> XI	gaggtagttcaaggTGACA

Xpxpnts2-21d	<i>Orpinomyces</i> XI	tttaaatgtaaaatgGCCTATCGG
XpXpnts2-22u	<i>ACT1</i>	cattttacatttaaaTGAAGGGAGGATAGTAGTAAAG
XpXpnts2dn		ATAG <u>TCGACT</u> TTTTCCAAAGTGACAGGTGC
XoUNNTS2-2u		AACATATGGAGGTAGTTTCAAGGTGACAG
XoUNNTS2-2d		ttttccaaagtgcagGTGCC
XoUNKanMXu		ctgtcactttggaaaaCAGCTGAAGCTTCGTACGCT
XoUNkanMXd		AAGAATTCGCATAGGCCACTAGTGGATCTG
XoUN pXIqcu		AAGGATCCTATTTTAGATTCTGACT
XoUN pXIqcd		AACCTGCAGGCCGCAAATTAAAGCCTTCGA
xpxpura3un		TTTGCCGGCAGCTTTTCAATTCATCTTTT
xpxpnts2dn		ATAGATATCTTTTCCAAAGTGACAGGTGC
XI qRT-PCR		
qpcrXIpirou		ATGGATGGTCACTTACCATACT
qpcrXIpirod		CACATAGCGAAACGTAACCAAT
qpcrXIloriu		ATGACAAAGGAATACTTCCCAAC
qpcrXIlorid		ACCATGCCATAGCGAATCTTAAC
qpcrACT1u		ATGGATTCTGGTATGTTCTAGC
qpcrACT1d		TTACAGATCAGTCAATATAGGAG

^a Restriction endonuclease sites in primer overhangs (if any) were underlined.

^b The bases written in lowercase are the recombinant sequences involved in the construction of integrating plasmid

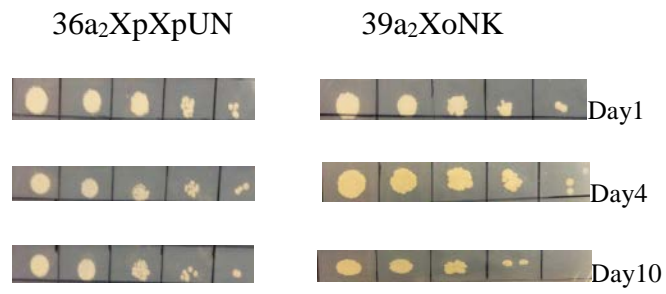


Figure S1. Drop-plate experiments on YP agar plates containing 20 g L⁻¹ xylose. Cells were incubated at 30°C for 3 days.