

Table S1: Oligonucleotides used in this study.

Category	Name	Description	Oligonucleotide sequence
pMBL180 construct ion	MBL122	mCherry 5' HindIII	gttacaagcttATG GTT TCT AAG GGT GAA GAA GAT
pMBL180 construct ion	MBL121	mCherry 3' PstI	ctcggactgcagTTAC TTG TAC AAT TCA TCC ATA CCA CC
pMBL180 construct ion	MBL354	SAT1 5' PstI	Gttaca ctgcag GAG TGA AAT TCT GGA AAT CTG GAA ATC
pMBL180 construct ion	MBL355	SAT1 3' HindIII	ctcggg gatcc GCA GGA CCA CCT TTG ATT GTA AAT AG
pADH76 Construct ion	AHO696	GFP 5' Aval	aaaactcgagcggatccccgggtaattaacggtatgtctaaaggtgaagaattattcactggtg
pADH76 Construct ion	AHO698	GFP 3' Aval	cttcctcgagTTATTTGTACAATTCATCCATACCATG
pADH57 construct ion	AHO407	TDH3 5' XbaI	tgggtatctagatgctcctcgtcgacaacgac
pADH57 construct ion	AHO408	TDH3 3' BamHI	CCCGGGGATCCTAATTTGATTGTAAAGTTTGTGATGTTAATTG
WOR4 Ectopic Expression	MLP780	Wor4 5' BamHI	Gttaca GGATCC ATG TCG AGT GAT AAA CCT GAA CAA G
WOR4 Ectopic Expression	MLP781	Wor4 3' XmaI	CTC GGA CCC GGG TTA AAT GCC TGG TTG GGT TG
WOR4 Ectopic Expression	MLP1137	Wor4 3' PstI	CTC GGA CTG CAG TTA AAT GCC TGG TTG GGT TG

RFG1 Ectopic Expression	MLP777	Rfg1 5' BamHI	Gttaca GGATCC ATG TCT ACT GCT ATC TAC TAT TCA ACT C
RFG1 Ectopic Expression	MLP778	Rfg1 3' XmaI	CTC GGA CCC GGG TTA TTG TGG AGG TTG TTG TTG ATG AT
WOR4 Deletion	NHO320	WOR4 5' External	TTGGGCTGATCTATACTTCTGGGTA
WOR4 Deletion	NHO321	WOR4 5' Internal	CACGGCGCGCCTAGCAGCGGCCTCAAGCTGCAAAAATAGTT TCTCTC
WOR4 Deletion	NHO322	WOR4 3' Internal	GTCAGCGGCCGCATCCCTGCGAAATGAGGATTTGAATGATC CTCTGTTG
WOR4 Deletion	NHO323	WOR4 3' External	TCAGCACTATCCATATCTTCAGCCA
WOR4 Deletion	NHO324	WOR4 5' Check	GAAGGAATTGAGCAATAGGACAAAGATTTG
WOR4 Deletion	NHO325	WOR4 3' Check	AGCGATGAATCAACATCACCAACTTG
WOR4 Deletion	NHO326	WOR4 5' ORF Check Set 1	ATGCCAATTACCAACCTCAAGCTC
WOR4 Deletion	NHO327	WOR4 3' ORF Check Set 1	CCATACCAATAGTTTCCAGCAGT
WOR4 Deletion	MLP1051	WOR4 5' ORF Check Set 2	TAA CCA AAA AGC ATG GTC ACA GAA AAT C
WOR4 Deletion	MLP1052	WOR4 3' ORF Check Set 2	CAA CGT CAT TGA TTC CTA AGA GAG AC
WOR4 Deletion	MLp1053	WOR4 5' ORF Check Set 3	CCT AGA TCC AAA GGA TTC AAA AAA CGC
WOR4 Deletion	MLp1054	WOR4 3' ORF	CAG GAA ACG AAC AAG GAT ATT TTC TCT C

		Check Set 3	
RFG1 Deletion	NHO3 47	RFG1 5' External	GGTGACTCCGATTTTCCGAACTAA
RFG1 Deletion	NHO3 48	RFG1 5' Internal	CACGGCGCGCCTAGCAGCGGTGGTGTGATGGTTTGCAAATAAATAC
RFG1 Deletion	NHO3 49	RFG1 3' Internal	GTCAGCGGCCGCATCCCTGCGTAGCTTGCTTTCTCTACAGAAAAGAGAAT
RFG1 Deletion	NHO3 50	RFG1 3' External	AAGGTGGCCGTGTGAGAAAGTTTA
RFG1 Deletion	NHO3 51	RFG1 5' Check	CACACACCTGCACACCTACATTTG
RFG1 Deletion	NHO3 52	RFG1 3' Check	TTGGTTTAGGACCTGGGCGT
RFG1 Deletion	NHO3 53	RFG1 5' ORF Check Set	TTGGTGGTGGTATTGATGGTAACTTT
RFG1 Deletion	NH354	RFG1 3' ORF Check Set	ACGAGAAGTTAATCCACCACTGAGACT
WOR4 Tagging	MLP87 4	WOR4-13x Myc and - GFP 5'	Cttaggaatcaatgacgttgattcaagaaccaaatgacgataacaaccaaccaaccaggcatt cggatccccgggtaattaacgg
WOR4 Tagging	MLP87 5	WOR4-13x Myc and - GFP 3'	TTA ATT TTC TAA AAT AAA TCT ATA TGA ATA CAA CAG AGG ATC ATT CAA ATC CTC ATT TCA TTT A GGCGGCCGCTCTAGAACTAGTGGATC
WOR4 Tagging	mLp89 3	WOR4 5' check	Atgattacactgctgaaactattggtatg
WOR4 Tagging	MLP88 0	WOR4 3' check	GTG GTA CGT GAC AAT GAG GTT GGG
WOR4 Tagging	MLP87 6	myc 5' check	CCGTTAATTAACCCGGGGATC
WOR4 Tagging	MLP87 7	myc 3' in check	Ggaactcagatccactagtctagagc

WOR4 Tagging	MLP87 8	myc 3' flipped check	TCACTAGTGAATTTCGCGCTCGAG
WOR4 Tagging	MBL20 9	GFP 5' check	GGT TGG CCA TGG AAC TGG CA
WOR4 Tagging	MBL38 2	GFP 3' flipped check	GGT GAT GGT CCA GTC TTG TTA CCA GAC
HTB1 and HTB2 Tagging	MLP11 94	HTB1- mCherr y 5'	gccgtttccgaaggtaccagagccgtcacaaaatactcatctgcttctagt ggtAGAAGAatcCCAGGTtaattaac GTT TCT AAG GGT GAA GAA GAT A
HTB1 and HTB2 Tagging	MLP11 95	HTB1- mCherr y 3'	AAA AAA AAA GTG GGC AAC TAA AAA TAC AAT TGG GAG ACA ATA CAA GAT CCA TCA CAT CTA GCA GGA CCA CCT TTG ATT GTA AAT AG
HTB1 and HTB2 Tagging	MLP11 92	HTB2- mCherr y 5'	gctgtttctgaaggtactagagctgttaccaaatactcttctgcttcta ggtAGAAGAatcCCAGGTtaattaac GTT TCT AAG GGT GAA GAA GAT A
HTB1 and HTB2 Tagging	MLP11 93	HTB2- mCherr y 3'	AAC AAT AAT TTG GAG AAA TAA ACC ATT CAT GAC AAA CCT CTC TCT CTC TTT CTT TTT TTA GCA GGA CCA CCT TTG ATT GTA AAT AG
HTB1 and HTB2 Tagging	mLP11 98	HTB1 5' check	TCT CCT TCT CTC TCT TGT CAC TTC TTC TTC CTC
HTB1 and HTB2 Tagging	MLP11 99	HTB1 3' check	CCA AGA GGT CCC TGA AAT TCA GAA GTT TCT TG
HTB1 and HTB2 Tagging	MLp11 96	HTB2 5' check	CAA TAA CAA CAA GAG ATT CAC GTG ACA CAC AAA
HTB1 and	MLP11 97	HTB2 3' check	GGA GAT AGA AAA GAA TTG GGT CCA ACA CCA

HTB2 Tagging			
HTB1 and HTB2 Tagging	MLP12 03	mCherr y 5' check	TTG TGG AGA CAA AAT ATC CCA GGC GAA TG
HTB1 and HTB2 Tagging	MLP12 04	mCherr y 3' Check	TTG ACC TCT TCA CGT ATA AAA CTA GAC CTC
qPCR	MLP11 86	Wor1 5'	TGGGTATGGTAACCACCTT
qPCR	MLP11 87	Wor1 3'	TGATACTACCTGTACCAGTCGCAA
qPCR	MLP11 90	Dyn1 control 5'	CATCCAACACTTCCAACCAATTACATTA
qPCR	MLP11 91	Dyn1 control 3'	TAATTCTTGTTCAAAAGCCAAAGATTCTG