

Table S1 *Saccharomyces cerevisiae* strains used in this study

Strain	Genotype	
SH1020	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1 /can1:ADE2:CAN1 his3-11,15/his3-11,15</i> (1996) <i>leu2-3,112/LEU2 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1 / trp1-3'Δ ura3-1 / ura3-1</i>	Piccirillo et al (2010a)
SH2081	<i>MATa/MATα his3Δ1/his3Δ1 leu2Δ0/leu2Δ0 ura3Δ0/ura3Δ0</i>	Giaever (2002)
SH3825	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 leu2-3,112/leu2-3,112 trp1-1/trp1-3'Δ ura3-1/ URA3</i> <i>ime2Δ-LacZ -TRP1 / ime2Δ::LEU2</i>	Piccirillo et al (2010a)
SH3827	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 leu2-3,112/leu2-3,112 TRP1/trp1-3'Δ ura3Δ::LEU2/ura3-1</i> <i>IME1+ / ime1Δ-LacZ- URA3</i>	Piccirillo et al (2010a)
SH3830	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>leu2-3,112/LEU2 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 TRP1+ / trp1-3'Δ ura3-1/ura3-1</i> <i>ime1Δ / ime1Δ-LacZ-URA3</i>	Piccirillo et al (2010a)
SH3881	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 URA3/ura3-1</i>	Piccirillo et al (2010a)
SH3883	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 URA3/ura3-1</i> <i>ime2Δ::LEU2/ime2Δ::LEU2</i>	Piccirillo et al (2010a)
SH4324, SH4429	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 mpk1Δ::URA3 /mpk1Δ::URA3</i>	This study
SH4414	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/TRP1 ura3-1/ura3-1 ime1Δ/ ime1Δ-RFP(mCherry)-</i> <i>URA3</i>	This study
SH4502, SH4503	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i> <i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 ptp2Δ::URA3 /ptp2Δ::URA 3</i>	This study
SH4708, SH4767	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study

	<i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 rlm1Δ::URA3 /rlm1Δ::URA3</i>	
SH4770	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 bck1Δ::URA3 /bck1Δ::URA3</i>	
SH4783	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1</i>	
	<i>ime2Δ::LEU2/ime2Δ::LEU2 rlm1Δ::URA3 /rlm1Δ::URA3</i>	
SH4789	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>leu2-3,112/LEU2+lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/TRP1+ ura3-1/ura3-1</i>	
	<i>ime2::GFP-TRP1/IME2+ rlm1Δ::URA3 /rlm1Δ::URA3</i>	
SH4793¹	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>leu2-3,112/LEU2lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/ trp1-3'Δ ura3-1/ura3-1</i>	
	<i>ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA3/RLM1</i>	
SH4799	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/ his3-11,15</i>	This study
	<i>LEU2+/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 leu2-3,112/LEU2+ ura3-1/ura3-1</i>	
	<i>TRP1/trp1-3'Δ rlm1Δ::URA3 /rlm1Δ::LEU2 IME1+/ ime1Δ-LacZ (URA3)</i>	
SH4800	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 TRP1/trp1-3'Δ ura3-1/ura3-1 ime1Δ/</i>	
	<i>ime1Δ-LacZ (URA3) rlm1Δ::LEU2 /rlm1Δ::LEU2</i>	
SH4805, SH5071	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	<i>leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 TRP1/trp1-3'Δ URA3/ura3-1</i>	
	<i>ime2Δ::LEU2/ime2Δ-GFP-TRP</i>	
SH4835, SH4836	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1 /can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-</i>	This study
	<i>3,112/ leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1 / trp1-3'Δ ura3-1 / ura3-1</i>	
	<i>rlm1Δ::LEU2 /rlm1Δ::LEU2</i>	
SH4838, SH5146	SH1020 containing pS778 (2XUAS ^{Rlm1} -CYC1pr-LacZ-URA3-Amp ^R)	This study
SH4839	SH1020 containing pS779 (CYC1pr-LacZ-URA3-Amp ^R)	This study
SH4848, SH4850	SH4835 or SH4836 containing pS778 (2XUAS ^{Rlm1} -CYC1pr-LacZ-URA3-Amp ^R)	This study
SH4924	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1 /can1:ADE2:CAN1 his3-11,15/his3-11,15</i>	This study
	(1996)	
	<i>leu2-3,112/LEU2 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1 / trp1-3'Δ ura3-1 / ura3-1</i>	

	<i>ime1Δ-LacZ (URA3)/ime1Δ</i>	
SH4954²	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 leu2-3,112/leu2-3,11 trp1-1/trp1-3'del ura3-1/ura3-1 ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA/rlm1 Δ::URA</i>	This study
SH4967, SH4968	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/TRP1 ura3-1/ura3-1 ime1Δ/ime1Δ-RFP(Cherry)-URA3 rlm1Δ::LEU2 /rlm1Δ::LEU2</i>	This study
SH5065	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/trp1-3'Δ ura3-1/ura3-1 ime2Δ::LEU2/ime2Δ-GFP-TRP pS778 (UAS_{Rim1}-LacZ-URA3)</i>	This study
SH5067	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/trp1-3'Δ ura3-1/ura3-1 ime2Δ::LEU2/ime2Δ-GFP-TRP pS779 (uasΔ-LacZ-URA3)</i>	This study
SH5071	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 TRP1⁺/trp1-3'Δ URA3⁺/ura3-1 ime2Δ::LEU2/ime2Δ-GFP-TRP1</i>	This study
SH5072, SH4790	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1 / TRP1⁺ ura3-1 / ura3-1 ime2Δ-GFP-TRP1 / ime2Δ::LEU2 rlm1Δ::URA/rlm1 Δ::URA</i>	This study
SH5073, SH5077	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 pIME1 (pS201, 2μ-IME1-URA3)</i>	This study
SH5074, SH5078	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 pS632 (URA3 vector)</i>	This study
SH5085, SH5149	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 rlm1Δ::LEU2 /rlm1Δ::LEU2 pIME1 (pS201, 2μ-IME1-URA3)</i>	This study
SH5094, SH5150	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 ura3-1/ura3-1 rlm1Δ::LEU2 /rlm1Δ::LEU2 pS632 (URA3 vector)</i>	This study
SH5105	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 LEU2⁺/leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/trp1-3'Δ ura3-1/URA3</i>	This study

	<i>ime2Δ::GFP-TRP1/IME2+</i>	
SH5276, SH5306	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/ leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/ trp1-3'Δ ura3-1/ura3-1 ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA3/rlm1Δ::URA3 YEp351 (LEU2)</i>	This study
SH5278, SH5304	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/ leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/ trp1-3'Δ ura3-1/ura3-1 ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA3/ rlm1Δ::URA3 pS303 (YEp351-IME1- LEU2)</i>	This study
SH5280	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/ leu2-3,112 lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/ trp1-3'Δ ura3-1/ura3-1 ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA3/RLM1 YEp351 (LEU2)</i>	This study
SH5282	<i>MATa/MATα ade2/ade2 can1:ADE2:CAN1/can1:ADE2:CAN1 his3-11,15/his3-11,15 leu2-3,112/ leu2-3,112lys2(3'Δ):HIS3:lys2(5'Δ)/LYS2 trp1-1/ trp1-3'Δ ura3-1/ura3-1 ime2::GFP-TRP1/ime2::GFP-TRP1 rlm1Δ::URA3/ RLM1 pS303 (YEp351-IME1-LEU2)</i>	This study

¹ SH4793 used as an independent isolate of the *RLM1⁺ ime2[□]-GFP* strain used in Fig. 2B, except that SH4793 is an *RLM1 / rlm1[□]* heterozygote and is homozygous for the fusion allele

² SH4954 used as an independent isolate of the *rlm1[□] ime2[□]-GFP* strain used in Fig. 2B, except that SH4954 is homozygous for the fusion allele