

Supplementary Table 1A

Profiles in relevant genotype		Yeast Strain	Condition	mapped reads	smooth window	number peaks before filter	number peaks after filter	mean peak width after filter (kb)	SD (kb)	median profile height	notes
Fig. 2A	WT	YS2828	HU, 90 min	13,311,114	1000 bp	187	91	7.1	1.5	0.50%	
Fig. 2A	<i>mcm4^{Δ74-174}</i>	YS2899	HU, 90 min	7,289,123	1000 bp	232	131	5.6	1.2	0.90%	
Fig. 2A	<i>sld3-38A</i>	YS2830	HU, 90 min	10,503,231	1000 bp	273	187	3.2	1	0.50%	
Fig. 2A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2886	HU, 90 min	10,875,046	1000 bp	292	259	2.5	0.6	0.50%	
Fig. 2A	<i>dbf4-19A</i>	YS2902	HU, 90 min	6,527,645	1000 bp	221	113	5.9	2.8	1.70%	
Fig. 2A	<i>mcm4^{Δ74-174} dbf4-19A</i>	YS2890	HU, 90 min	11,190,863	1000 bp	221	151	6.4	1.6	1.30%	
Fig. 2A	<i>sld3-38A dbf4-19A</i>	YS2906	HU, 90 min	7,461,491	1000 bp	299	239	2.2	0.9	0.60%	
Fig. 2A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 90 min	8,734,875	1000 bp	302	274	2.1	0.5	0.60%	
Fig. 3A	WT	YS2828	HU, 25 min	4,612,750	500 bp	271	149	1.3	0.2	0.70%	
Fig. 3A	WT	YS2828	HU, 50 min	19,806,922	500 bp	232	114	3.3	0.5	0.60%	
Fig. 3A	WT	YS2828	HU, 75 min	26,924,268	500 bp	184	92	6.8	1.1	0.50%	
Fig. 3A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 25 min	6,182,622	500 bp	302	218	1.1	0.2	1.10%	
Fig. 3A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 50 min	17,944,322	500 bp	305	265	1.1	0.3	0.80%	
Fig. 3A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 75 min	26,404,584	500 bp	292	265	2.1	0.6	0.70%	
Fig. 3B	<i>sld3-38A dbf4-19A</i>	YS2906	HU, 25 min	15,199,022	500 bp	259	119	1.5	0.4	0.30%	
Fig. 3B	<i>sld3-38A dbf4-19A</i>	YS2906	HU, 50 min	18,232,289	500 bp	295	187	1.5	0.7	0.30%	
Fig. 3B	<i>sld3-38A dbf4-19A</i>	YS2906	HU, 75 min	14,651,214	500 bp	293	252	2	1	0.40%	
Fig. 3B	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 25 min	17,966,386	500 bp	295	215	1.2	0.3	0.40%	
Fig. 3B	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 50 min	22,584,515	500 bp	305	263	1.2	0.4	1.10%	
Fig. 3B	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 75 min	17,510,882	500 bp	291	265	1.9	0.6	0.70%	
Fig. 4A	WT	YS2828	HU, 90 min	47,113,533	1000 bp	168	62	8.6	0.9	0.50%	
Fig. 4A	<i>mcm4^{Δ74-174}</i>	YS2899	HU, 90 min	40,645,958	1000 bp	201	73	7.1	0.8	0.60%	
Fig. 4A	<i>sld3-38A</i>	YS2830	HU, 90 min	40,183,230	1000 bp	271	128	3.9	0.9	0.40%	
Fig. 4A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2886	HU, 90 min	49,166,452	1000 bp	286	211	2.8	0.6	0.50%	
Fig. 4A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS3001	HU, 90 min	47,911,372	1000 bp	194	80	7.5	1	1.60%	
Fig. 4A	<i>mcm4^{Δ2-145}</i>	YS3038	HU, 90 min	45,483,693	1000 bp	62	15	20.4	3.9	2.90%	
Fig. 4A	<i>mcm4^{Δ2-145} sld3-38A</i>	YS2997	HU, 90 min	40,906,504	1000 bp	166	60	9.9	1.4	1.30%	
Fig. 5A	WT	YS2828	HU, 90 min	49,209,936	2000 bp	161	73	11.2	0.9	1.00%	
Fig. 5A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 90 min	36,950,160	1000 bp	287	237	2.9	0.7	0.80%	
Fig. 5A	<i>sml1Δ</i>	YS3066	HU, 90 min	41,858,795	2000 bp	82	58	17.7	3.4	10.70%	
Fig. 5A	<i>mec1Δ sml1Δ</i>	YS3075	HU, 90 min	41,429,448	2000 bp	147	134	11.3	3.2	18.80%	
Fig. 5A	<i>rad53Δ sml1Δ</i>	YS3077	HU, 90 min	41,234,875	2000 bp	124	107	14.6	3.3	18.80%	
Fig. S1A	WT	YS2828	HU, 90 min	49,209,936	2000 bp	153	71	11.1	0.9	1.00%	ends masked
Fig. S1A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	HU, 90 min	36,950,160	1000 bp	267	221	2.9	0.7	0.80%	ends masked
Fig. S1A	<i>sml1Δ</i>	YS3066	HU, 90 min	41,858,795	2000 bp	79	57	17.6	3.4	10.70%	ends masked
Fig. S1A	<i>mec1Δ sml1Δ</i>	YS3075	HU, 90 min	41,429,448	2000 bp	141	133	11.5	3.2	21.90%	ends masked
Fig. S1A	<i>rad53Δ sml1Δ</i>	YS3077	HU, 90 min	41,234,875	2000 bp	120	107	14.7	3.1	20.00%	ends masked
Fig. 6A	WT	YS2571	YPD, 25 min	21,381,611	1000 bp	206	99	7.2	1.2	1.70%	
Fig. 6A	<i>mcm4^{Δ2-145}</i>	YS2758	YPD, 25 min	13,296,061	1000 bp	186	72	8.1	1.3	2.10%	
Fig. 6A	<i>mcm4^{Δ2-174}</i>	YS2585	YPD, 25 min	8,314,459	1000 bp	207	136	7	1.3	6.80%	
Fig. 6A	<i>mcm4^{Δ74-174}</i>	YS2574	YPD, 25 min	25,590,224	1000 bp	210	120	7.1	1	2.80%	
Fig. 6A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2761	YPD, 25 min	13,003,604	1000 bp	174	76	8.8	1.5	3.20%	
Fig. 6A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2764	YPD, 25 min	21,982,699	1000 bp	197	107	8.1	1.3	3.50%	
Fig. 7A	WT	YS2828	YPD, 25 min	5,880,287	1000 bp	236	98	4.8	1	0.80%	
Fig. 7A	<i>mcm4^{Δ74-174}</i>	YS2899	YPD, 25 min	8,532,204	1000 bp	252	110	3.8	0.7	0.70%	
Fig. 7A	<i>sld3-38A</i>	YS2830	YPD, 25 min	7,370,826	1000 bp	237	97	4.7	1	0.60%	
Fig. 7A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2886	YPD, 25 min	3,769,402	1000 bp	245	124	4.6	0.9	1.30%	
Fig. 7A	<i>dbf4-19A</i>	YS2902	YPD, 25 min	17,717,050	1000 bp	178	70	7.8	1.9	1.50%	
Fig. 7A	<i>mcm4^{Δ74-174} dbf4-19A</i>	YS2890	YPD, 25 min	6,040,131	1000 bp	231	114	5.3	1.2	2.00%	
Fig. 7A	<i>sld3-38A dbf4-19A</i>	YS2906	YPD, 25 min	4,409,073	1000 bp	216	73	4.7	1	0.50%	
Fig. 7A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	YPD, 25 min	10,194,071	1000 bp	239	100	4.4	0.8	1.10%	
Fig. 8A	WT	YS2571	MMS, 50 min	17,523,516	2000 bp	82	51	17.3	1.7	12.10%	
Fig. 8A	<i>mcm4^{Δ2-145}</i>	YS2758	MMS, 50 min	17,782,954	2000 bp	17	10	29.4	12.4	21.10%	
Fig. 8A	<i>mcm4^{Δ2-174}</i>	YS2585	MMS, 50 min	21,104,155	2000 bp	17	15	22.1	13	39.90%	
Fig. 8A	<i>mcm4^{Δ74-174}</i>	YS2574	MMS, 50 min	19,871,276	2000 bp	124	74	14.2	2.3	13.50%	
Fig. 8A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2761	MMS, 50 min	15,214,419	2000 bp	25	13	27.6	8.8	21.50%	
Fig. 8A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2764	MMS, 50 min	20,407,279	2000 bp	63	42	20	3.1	16.40%	
Fig. 9A	WT	YS2828	MMS, 50 min	25,602,878	2000 bp	78	47	16.9	2.4	7.70%	
Fig. 9A	<i>mcm4^{Δ74-174}</i>	YS2899	MMS, 50 min	19,140,949	2000 bp	117	62	13.7	2.1	8.40%	
Fig. 9A	<i>sld3-38A</i>	YS2830	MMS, 50 min	24,865,918	2000 bp	159	102	11.6	2.2	8.60%	
Fig. 9A	<i>mcm4^{Δ74-174} sld3-38A</i>	YS2886	MMS, 50 min	26,546,733	2000 bp	190	146	9.3	1.4	10.20%	
Fig. 9A	<i>dbf4-19A</i>	YS2902	MMS, 50 min	29,456,510	2000 bp	49	24	24	4.5	14.00%	
Fig. 9A	<i>mcm4^{Δ74-174} dbf4-19A</i>	YS2890	MMS, 50 min	27,231,721	2000 bp	90	55	17.3	4.3	16.40%	
Fig. 9A	<i>sld3-38A dbf4-19A</i>	YS2906	MMS, 50 min	20,216,769	2000 bp	176	117	10.9	3.9	10.70%	
Fig. 9A	<i>mcm4^{Δ74-174} sld3-38A dbf4-19A</i>	YS2894	MMS, 50 min	31,625,044	2000 bp	199	177	9	1.7	11.70%	