

Table S1. Genes used in this study and associated RNAi phenotypes

Gene name	ORF name (LG)	Reported RNAi phenotypes
<i>cdk-1</i>	T05G5.3 (III)	Emb (Kamath et al., 2003; Piano et al., 2000; Gonczy et al., 2000; Wallenfang and Seydoux, 2000; Simmer et al., 2003; Boxem et al., 1999), Ste (Kamath et al., 2003; Piano et al., 2000)
<i>cyb-1</i>	ZC168.4 (IV)	Emb (Piano et al., 2000), Ste (Piano et al., 2000)
<i>cyb-2.1*</i>	Y43E12A.1 (IV)	Emb (Piano et al., 2000; Simmer et al., 2003; Maeda et al., 2001), Ste (Piano et al., 2000)
<i>cyb-2.2*</i>	H31G24.4 (I)	Emb (Piano et al., 2000)
<i>cyb-3</i>	T06E6.2 (V)	Emb (Kamath et al., 2003; Piano et al., 2000; Simmer et al., 2003)
<i>wee-1.1</i>	F35H8.7 (II)	WT (this study)
<i>wee-1.2[†]</i>	C01G12.4 (II)	none (this study)
<i>wee-1.3</i>	Y53C12A.1 (II)	Emb (Kamath et al., 2003; Piano et al., 2000), Ste (Kamath et al., 2003; Piano et al., 2000; Maeda et al., 2001), Ooc (Detwiler et al., 2001)

**cyb-2.1* and -2.2 share 87% identity; the major difference between the two is that H31G24.4 has a 24 residue insert that is absent in Y43E12A.1 (Nieduszynski et al., 2002).

[†]This gene is predicted to be a pseudogene by The Genome Consortium (see Materials and methods).

LG, linkage group; Emb, embryonic lethal; Ste, sterile; Ooc, oocyte formation abnormal.

Table S2. WEE-1.3 depletion results in chromosome coalescence

Strain	RNAi condition	RNAi duration	Chromatin coalescence/stringy phenotype								Total gonad arms analyzed (n)
			Oocyte position								
			-1	-2	-3	-4	-5	-6	-7	-8	
N2	None		0	0	0	0	0	0	0	0	90
N2	<i>wee-1.3</i> fed	28-32 hours	51 (+1)	31 (+2)	19 (+1)	5 (+1)	2	1	1	1	57
H2B::GFP	None		0	0	0	0	0	0	0	0	53
H2B::GFP	<i>wee-1.3</i> fed	24-28 hours	59	51 (+4)	37 (+3)	21 (+8)	18 (+4)	4 (+6)	4 (+3)	1 (+2)	60
H2B::GFP	<i>wee-1.3</i> fed	31-32 hours	21	20	17	10	6 (+1)	1 (+1)	0	0	22
H2B::GFP	<i>wee-1.3</i> fed	41-52 hours	25	21	17	13	12	6 (+1)	4	3 (+1)	27
<i>fog-2</i> unmated	None		0	0	0	0	0	0	0	0	93
<i>fog-2</i> unmated	<i>wee-1.3</i> fed	43-48 hours	0	0	0	0	0	0	0	0	71
<i>fog-2</i> mated	None		0	0	0	0	0	0	0	0	36
<i>fog-2</i> mated	<i>wee-1.3</i> fed	43-48 hours	35	31	27 (+2)	18 (+1)	13 (+3)	10 (+1)	6 (+1)	2 (+1)	35

N2 is the wild-type strain. Transgenic animals expressing a histone H2B::GFP fusion protein are indicated as H2B::GFP. Mutants homozygous for *fog-2* do not make sperm and essentially are female. The chromosome morphology of oocytes in positions -1 through -8 was monitored by DAPI or GFP fluorescence. The oocyte chromosomes of untreated hermaphrodites and WEE-1.3-depleted *fog-2* females remain in diakinesis. Numbers in parentheses represent oocytes with stringy chromosomes.