

**Table 1. Steady state cultures**

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Strain	No. of cycles analysed	BL ( $\mu\text{m}$ )	DL ( $\mu\text{m}$ )	CT (min)	CV <sub>CT</sub> (%)	CV <sub>DL</sub> (%)	Slope Ext/BL ( $\mu\text{m}/\mu\text{m}$ )	Slope CT/BL (min/ $\mu\text{m}$ )	CT difference between daughters (min)	CV <sub>DA</sub> (%)
1. WT (972)	164	8.2 <sup>0.52</sup>	14.4 <sup>0.85</sup>	148 <sup>16</sup>	10.8	5.9	-0.89	-19.1	12 <sup>10</sup>	3.2
2. WT (972 - diploid)	190	12.4 <sup>0.88</sup>	22.2 <sup>1.60</sup>	159 <sup>16</sup>	10.4	7.2	-0.37	-8.8	15 <sup>12</sup>	3.0
3. <i>wee1-6</i>	105	4.7 <sup>0.58</sup>	7.9 <sup>0.83</sup>	172 <sup>34</sup>	19.6	10.5	-0.97	-35.3	25 <sup>29</sup>	7.1
4. <i>wee1-6</i> (diploid)	105	6.8 <sup>0.59</sup>	11.9 <sup>1.00</sup>	160 <sup>23</sup>	14.4	8.4	-0.77	-19.9	14 <sup>13</sup>	3.9
5. <i>wee1-50</i>	156	5.0 <sup>0.56</sup>	8.2 <sup>0.85</sup>	146 <sup>30</sup>	20.4	10.4	-0.55	-33.9	20 <sup>21</sup>	6.6
6. <i>wee1Δ</i>	129	5.0 <sup>0.56</sup>	8.4 <sup>0.86</sup>	155 <sup>30</sup>	19.5	10.2	-1.01	-36.3	21 <sup>19</sup>	5.8
7. <i>cdc2-3w</i>	137	5.4 <sup>0.48</sup>	9.0 <sup>0.69</sup>	143 <sup>18</sup>	12.4	7.7	-0.62	-20.9	16 <sup>12</sup>	6.1
8. <i>cdc2-1w</i>	107	5.5 <sup>0.51</sup>	9.1 <sup>1.00</sup>	157 <sup>27</sup>	17.4	9.9	-0.46	-18.0	21 <sup>15</sup>	5.9
9. <i>cdc2-33</i>	148	8.5 <sup>0.48</sup>	15.2 <sup>0.76</sup>	197 <sup>21</sup>	10.5	5.0	-0.40	-26.5	18 <sup>13</sup>	3.2
10. <i>cdc2-33 wee1-6</i>	40	5.2 <sup>0.42</sup>	8.5 <sup>0.56</sup>	217 <sup>31</sup>	14.3	6.6	-0.27	-46.1	36 <sup>26</sup>	5.4
11. <i>cdc2-3w cdc25Δ</i>	115	9.7 <sup>0.77</sup>	17.6 <sup>1.26</sup>	159 <sup>24</sup>	15.3	7.2	-0.87	-21.3	24 <sup>16</sup>	4.3
12. <i>cdc2-3w cdc25Δ pyp3Δ</i>	80	11.8 <sup>1.10</sup>	21.3 <sup>1.97</sup>	153 <sup>31</sup>	20.0	9.2	-1.20	-17.8	27 <sup>23</sup>	4.0
13. <i>wee1-50 cdc25Δ</i>	465	9.9 <sup>1.93</sup>	18.2 <sup>3.71</sup>	131 <sup>47</sup>	35.8	20.3	*	*	37 <sup>37</sup>	5.1
14. <i>cdc2-M35</i>	116	11.0 <sup>0.96</sup>	20.1 <sup>1.51</sup>	219 <sup>24</sup>	10.8	7.5	-0.32	-15.1	20 <sup>18</sup>	4.7

Mean values plus s.d. as superscript. BL, birth length; DL, division length; CT, cycle time; CV, coefficient of variation; Ext, total extension (DL-BL); DA, asymmetry between daughter cells (see Analysis). All at 35°C except for strains 9,10,14 at 29°C. Disruptions ( $\Delta$ ), were: *wra4<sup>+</sup> wra4-D18* in strains 6,11,12,13, which also had a *leu1* marker. Strains 3 and 4 were from one film and separated by BL in each cycle (see Analysis). All strains were  $h^{-}$ . Since BL and DL were measured in some incomplete cycles, the s.e.m. will be less than the value to be derived from the s.d. and the number of the complete cycles in column 2. The number of daughter cells in column 10 is less than that in column 2. For \* in columns 8 and 9, see Fig. 6.