

Some yeast *cdc* genes and their functions

Name in budding yeast	Name in fission yeast	Product	Phenotype of loss-of-function mutant
<i>CDC2</i>	<i>pol3⁺</i>	subunit of DNA polymerase δ	S phase arrest
<i>CDC9</i>	<i>cdc17⁺</i>	DNA ligase	G2 arrest with imperfectly replicated DNA
<i>CDC28</i>	<i>cdc2⁺</i>	protein kinase	arrest at START or G2 checkpoint
<i>CLN1,2,3</i>	<i>puc1^{+,?}</i>	G1 cyclins	arrest at START if all 3 genes inactive
<i>CLB1,2,3,4</i>	<i>cdc13^{+,?}</i>	mitotic cyclins	arrest at G2 checkpoint
<i>WEE1</i>	<i>wee1⁺</i>	protein kinase	premature passage through G2 to give small daughters
<i>RAD9</i>	<i>rhp9^{+/crb2⁺}</i>	component of signaling pathway	failure to delay mitosis when DNA damaged

