

Cell Cycle Control

Biology

The checkpoints, and what happens when they fail.

Where the cycle is checked and for what.

Checkpoint	Checks
G1 / restriction	Size, nutrients, DNA damage
G2	DNA fully replicated and undamaged
Metaphase / spindle	All chromosomes attached to the spindle

p53 halts the cycle for repair or triggers apoptosis. It is mutated in roughly half of all human cancers.