

**Cyc:** cyclin    **CDK:** cyclin dependent kinase

**RNA:** ribonucleic acid

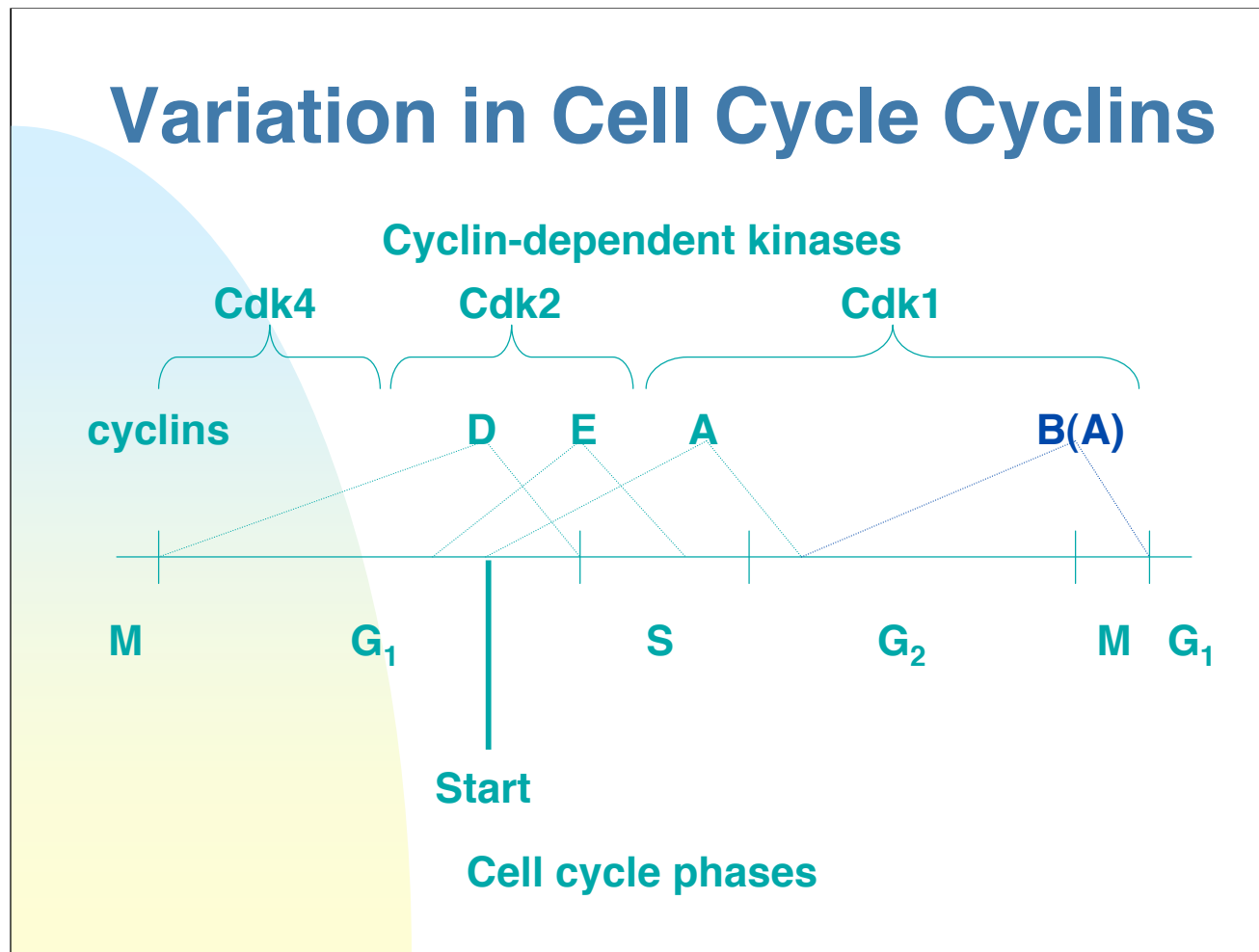
**p53:** cell cycle control protein, MW 53kDa, also involved in other phases of cell cycle

**pRb:** retinoblastoma protein

**DNA:** deoxyribonucleic acid

**H1:** histone H1

**Abl:** Abelson interacting protein



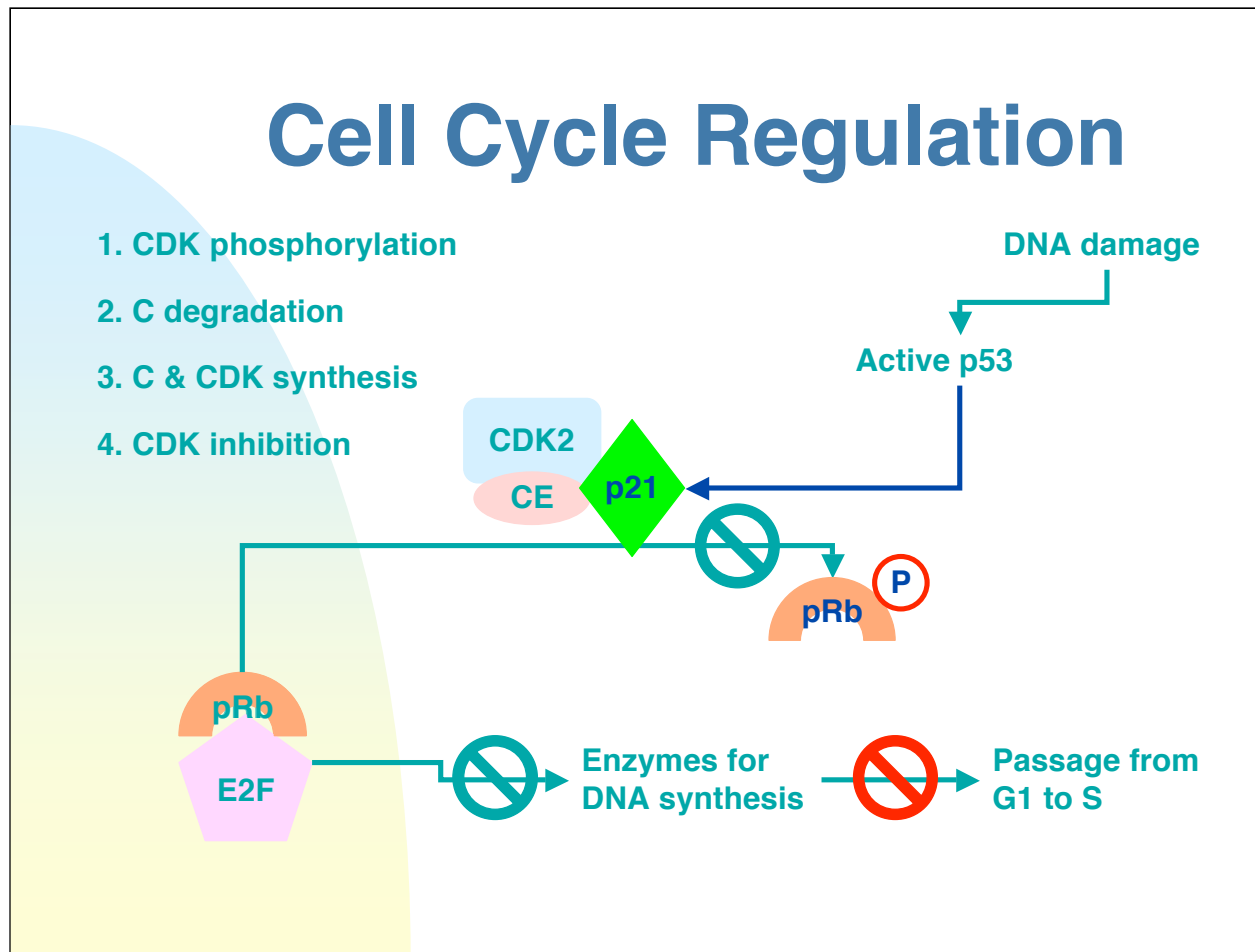
**G<sub>1</sub>**: gap phase 1

**S**: DNA synthesis phase

**G<sub>2</sub>**: gap phase 2

**M**: mitosis

**Cdk**: cyclin-dependent kinase



**CDK2:** cyclin dependent kinase 2

**CE:** cyclin E **pRb:** retinoblastoma protein

**E2F:** transcription factor E2F

**DNA:** deoxyribonucleic acid

**p53:** cell cycle control protein, MW 53 kDa

**p21:** protein, MW 21 kDa

# Review Questions

- What are and what happens during the phases of the cell cycle?
- Which proteins are involved in the regulation of the cell cycle?
- Which cyclins and cyclin-dependent kinases are most important in individual phases of the cell cycle?
- What are four mechanisms for regulating cyclin-dependent kinase activity?
- What role do p53, p21, and pRb play in the G1 to S transition?