Name _____

How tumor suppressor genes block cell division

http://highered.mcgraw-hill.com/sites/0072437316/student_view0/chapter20/animations.html

Directions—Select the option above at the url listed. Run the animation and answer the following questions in the spaces provided.

1. What proteins are produced at the end of G1 that causes the cell cycle to continue?

2. These proteins are activated when they bind with what?

3. What specific molecular function do tumor-supp[ressor proteins have?

4. What specific function does E2F have?

5. What molecular event prevents this from happening?

6. When cyclins are activated by CDK's (cyclin-dependent kinases), how will they interact with RB/E2K complexes? Will the cell cycle proceed or be halted as a result?

7. How does p16 reinforce RB's tumor suppressing ability?

8. How does p53 support RB's tumor suppressing ability?