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## SELF-TEST CORNER OF MOLBIOL UNDERGRADUATE: DESIGNING OWN TESTS Part 4. Kuandyk Abdeshev

Posted By Zaure G. Aytasheva, 1 minute ago Edit Post Delete Post

## DNA SEQUENCING TECHNIQUES

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|-------------------------------|--|
| Biotechnology 13-10           |  |

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DNA sequencing methods

- 1. What was the first eukaryotic chromosome to be successfully sequenced?
- a. Yeast chromosome
- b. Amoeba chromosome
- c. Arabidopsis chromosome
- d. E.coli
- e. None of these
- 2. Another name of a Maxam-Gilbert sequencing?
- a. Enzymatic sequencing
- b. Chemical sequencing
- c. Protein sequencing
- d. All of them
- e. None of them

| 3. Another term for a Sanger sequencing?                                     |
|--|
| a. Parallel sequencing   |
| b. Chain-termination sequencing  |
| c. Shotgun sequencing  |
| d. a+b   |
| e. None of them  |
|  |
| 4. What should cause the termination of chain elongation in a Sanger method? |
| a. Incorporation of a regular DNA nucleotide                                 |
| b. Incorporation of a dideoxynucleotide                                      |
| c. Denaturation of the double-stranded test fragments                        |
| d. DNA polymerase encountering the stop codon                                |
| e. Primer dissociation from the strands in result of denaturation            |
|  |
| 5. Maxam-Gilbert sequencing requires at one of 5' ends of DNA                |
| a. Radioactive labeling  |
| b. Restriction enzyme  |
| c. Initial PCR reaction  |
| d. All of them taken together  |
| e. None of them  |
|  |
| 6. Maxam and Gilbert used to visualize the fragments.                        |
| a. Chromatography  |
| b. Autoradiography   |

|                | c. Southern blotting  |
|----------------|---|
|                | d. Northern blotting  |
|                | e. Western blotting   |
|                |   |
|                |   |
| 7. What        | t is the specific feature of a Maxam – Gilbert technique?                   |
| a. It is r     | not suitable for long chains  |
| b. It req      | quires specific enzymes   |
| c. It req      | quires specific reagents  |
| d. a+b         |   |
| e. a+c         |   |
|                |   |
| 8. Whic        | ch of the following methods were used for the "First Human Genome Project"? |
| a. Maxa        | am-Gilbert sequencing   |
| b. <u>Sang</u> | er sequencing   |
| c. Fiers       | sequencing  |
| d. a+b         |   |
| e. None        | e of them   |
|                |   |
| 9. In M        | axam-Gilbert method   |
| a. DNA         | to be sequenced is used as a template for synthesizing cDNA                 |
| b. cDN         | A synthesis is interrupted by dideoxyribonucleitides                        |
| c. DNA         | molecule to be sequenced is enzymatically cleaved at specific sites         |
|                |   |

- 10. In Sanger's method ...
- a. DNA to be sequenced is used as a template for synthesizing cDNA
- b. cDNA nucleotides is interrupted by using dideoxyribonucleotides
- c. Labelled deoxynucleoside triphosphates are used as substrates

## d. All of the above

e. None of the above

Instructor Z. Aytasheva

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