GMAT阅读资料第6篇 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/126/2021_2022_GMAT_E9_98_85_E8_AF_BB_c89_126446.htm Protein synthesis begins when the gene encoding a protein is activated. The genes sequence of nucleotides is transcribed into a molecule of messenger RNA (mRNA), which reproduces the information contained in that (5) sequence. Transported outside the nucleus to the cyto- plasm, the mRNA is translated into the protein it encodes by an organelle known as a ribosome, which strings together amino acids in the order specified by the sequence of elements in the mRNA molecule. Since the (10) amount of mRNA in a cell determines the amount of the corresponding protein, factors affecting the abundance of mRNAs play a major part in the normal functioning of a cell by appropriately regulating protein synthesis. For example, an excess of certain proteins can cause cells (15) to proliferate abnormally and become cancerous. a lack of the protein insulin results in diabetes. Biologists once assumed that the variable rates at which cells synthesize different mRNAs determine the quantities of mRNAs and their corresponding proteins (20) in a cell. However, recent investigations have shown that the concentrations of most mRNAs correlate best, not with their synthesis rate, but rather with the equally vari- able rates at which cells degrade the different mRNAs in their cytoplasm. If a cell degrades both a rapidly and (25) a slowly synthesized mRNA slowly, both mRNAs will accumulate to high levels. 1. The passage is primarily concerned with discussing the (A)

influence of mRNA concentrations on the development of red blood cells (B) role of the synthesis and degradation of mRNA in cell functioning (C) mechanism by which genes are transcribed into mRNA (D) differences in mRNA concentrations in cell nuclei and in the cytoplasm (E) way in which mRNA synthesis contributes to the onset of diabetes 2. The passage suggests that a biologist who held the view described in the first sentence of the second paragraph would most probably also have believed which of the following? (A) The rate of degradation of specific mRNAs has little effect on protein concentrations. (B) The rate of degradation of specific mRNAs should be studied intensively. (C) The rates of synthesis and degradation for any given mRNA are normally equal. (D) Different mRNAs undergo degradation at widely varying rates. (E) Most mRNAs degrade very rpaidly. 3. Which of the following best describes the relationship between the second and third paragraphs of the passage? (A) The second paragraph presents arguments in support of a new theory and the third paragraph presents arguments against that same theory. (B) The second paragraph describes a traditional view and the third paragraph describes the view that has replaced it on the basis of recent investigations. (C) The third paragraph describes a specific case of a phenomenon that is described generally in the second paragraph. (D) The third paragraph describes an investigation that was undertaken to resolve problems raised by phenomena described in the second paragraph. (E) Both paragraphs describe in detail specific examples of the phenomenon that is introduced in the first paragraph. 4. The

accumulation of concentrations of hemoglobin in red blood cells is mentioned in the passage as an example of which of the following? (A) The effectiveness of simultaneous variation of the rates of synthesis and degradation of mRNA (B) The role of the ribosome in enabling a parent cell to develop properly into a more specialized form (C) The importance of activating the genes for particular proteins at the correct moment (D) The abnormal proliferation of a protein that threatens to make the cell cancerous (E) The kind of evidence that biologists relied on for support of a view of mRNA synthesis that is now considered obsolete 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com