Milestones in Immunology

Immunology · Answer Key · 20 Questions

1. In what year did Edward Jenner publish his findings on the cowpox vaccination against smallpox?

A) 1789
B) 1796
C) 1802
D) 1815

2. Emil von Behring received the first Nobel Prize in Physiology or Medicine in 1901 for his work on which therapy?

A) Serum therapy against diphtheria
B) Smallpox inoculation
C) Polio vaccine development
D) Discovery of phagocytosis

3. How many polypeptide chains make up the basic structure of a human immunoglobulin G (IgG) molecule?

A) 2
B) 4
C) 6
D) 8

4. In 1908, who shared the Nobel Prize with Paul Ehrlich for their work on phagocytosis?

A) Robert Koch
B) Louis Pasteur
C) Ilya Mechnikov
D) Charles Richet

5. The human Major Histocompatibility Complex (MHC), known as HLA, is located on which chromosome?

A) Chromosome 6
B) Chromosome 11
C) Chromosome 19
D) Chromosome 21

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

6. Approximately what percentage of the total serum immunoglobulin concentration in a healthy adult is comprised of IgG?

A) 20-30%
B) 40-50%
C) 70-80%
D) 90-95%

7. Which scientist discovered the 'anaphylaxis' phenomenon in 1902 while working with dog experiments?

A) Charles Richet
B) Karl Landsteiner
C) Jules Bordet
D) Susumu Tonegawa

8. How many constant domains (CH) are typically found in the heavy chain of an IgG antibody?

A) One
B) Two
C) Three
D) Four

9. The discovery of the ABO blood group system was credited to Karl Landsteiner in what year?

A) 1895
B) 1901
C) 1909
D) 1915

10. What is the approximate molecular weight of a monomeric IgA antibody in kilodaltons (kDa)?

A) 90 kDa
B) 160 kDa
C) 300 kDa
D) 900 kDa

11. In 1975, Georges Köhler and César Milstein published the technique for producing which biological agent?

A) Monoclonal antibodies
B) DNA recombinant vaccines
C) Interferons
D) T-cell receptors

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

12. How many binding sites for antigen does a single Pentameric IgM molecule have?

A) 2
B) 5
C) 10
D) 12

13. The complement system consists of a series of at least how many distinct plasma proteins?

A) 5
B) 10
C) 20
D) 30

14. Peter Medawar won the 1960 Nobel Prize for his discovery of what immunological principle?

A) Acquired immunological tolerance
B) The structure of antibodies
C) The role of histamine
D) The function of B-cells

15. What is the average half-life of IgG in the human circulatory system?

A) 3 days
B) 7 days
C) 21 days
D) 45 days

16. In 1987, Susumu Tonegawa was awarded the Nobel Prize for discovering the genetic principle behind what?

A) The diversity of antibody formation
B) The mechanism of apoptosis
C) The structure of MHC Class I
D) The function of dendritic cells

17. The 'T' in T-lymphocytes stands for which organ where these cells undergo maturation?

A) Thyroid
B) Thalamus
C) Thymus
D) Tonsils

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

18. How many subclasses of IgG exist in humans?

A) 2
B) 4
C) 6
D) 8

19. The discovery of IgE, the antibody class associated with allergic reactions, occurred in what year?

A) 1945
B) 1956
C) 1966
D) 1976

20. Which cytokine, discovered in 1957, was named for its ability to 'interfere' with viral replication?

A) Interferon
B) Interleukin-1
C) Tumor Necrosis Factor
D) Chemokine

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.