Appendix 3. Questions for Influenza Virus Evaluation

Advanced Cell Biology (BIO315HF)
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Animation versus Graphics Evaluation: Influenza Infection

Part II. Specific Questions. Circle the correct answer...

1. The influenza virus is taken into cells via the process of
a. Pinocytosis
b. Protein-mediated uptake
c. Endocytosis
d. Cytokinesis
e. Viral kinesis

2. After viral uptake, the viral particle is in an intracellular vesicle that has
a. A neutral pH
b. An acidic pH
c. An alkaline pH
d. No significant pH
e. None of the above

3. The pH in the intracellular vesicle
a. Causes a shape change in HA
b. Causes a shape change in the vesicular membrane
c. Causes a shape change in NA
d. Causes it to exocytose HA
e. Both a and c are correct

4. The acronym HA stands for
a. Hemalysin
b. Hemagglutinin
c. Hemaglobin
d. Hemacyanin
e. None of the above

5. The acronym NA stands for
a. Neuraglutinin
b. Neural Adhesion
c. Neuraminidase
d. Neuraminic Acid
e. None of the above

6. On the influenza virus, NA and HA
a. Make up 80% of the viral surface
b. Are both RNA molecules
c. Are both proteins
d. Both a and b are correct

e. Both a and c are correct

7. The Influenza virus
a. Contains 8 DNA gene segments encoding 8 proteins
b. Contains 8 RNA gene segments encoding 8 proteins
c. Contains 8 DNA gene segments encoding 10 proteins
d. Contains 8 RNA gene segments encoding 10 proteins
e. Both a and b are correct

8. A critical stage in viral entry is
a. A conformational change in NA allowing release of the viral material from intracellular vesicles
b. A conformational change in NA allowing binding of the viral material to intracellular vesicles
c. A conformational change in HA allowing release of the viral material from intracellular vesicles
d. A conformational change in HA allowing binding of the viral material to intracellular vesicles
e. None of the above

9. Influenza viruses bind to the cell surface via
a. Host cell HA-Viral protein interactions
b. Viral HA-Host cell receptor interactions
c. Viral NA-Host cell HA interactions
d. Viral HA-Host cell HA interactions
e. Viral NA-Host cell NA interactions

10. Influenza viruses enter human cells sequentially via
a. Protein interactions at the cell surface, vesicle uptake and viral material release into the cytoplasm
b. Viral binding to the cell surface, uptake into vesicles followed by viral material release into the cytoplasm
c. HA binding to the cell surface, uptake into vesicles followed by viral material release into the cytoplasm
d. Both a and b are correct
e. All of the above are correct