

Cell to Cell Communication Quiz

1. Which of the following is the correct order of events in signal transduction?
 - a. Receptor -> Chemical Signal -> Target Proteins -> Intracellular Proteins ->Cell Response
 - b. Chemical Signal -> Target Proteins-> Receptor -> Intracellular Proteins ->Cell Response
 - c. Chemical Signal -> Receptor -> Intracellular Proteins -> Target Proteins -> Cell Response
 - d. Chemical Signal -> Receptor -> Target Proteins -> Intracellular Proteins -> Cell Response

2. Which of the following types of chemical signals is secreted in the blood and travels long distances to its target.
 - a. Neurotransmitters
 - b. Cytokines
 - c. Hormones
 - d. Target Proteins

3. Which of the following is a characteristic of a receptor?
 - a. Speed
 - b. Specificity
 - c. Saturation
 - d. Competition
 - e. All except a

4. This type of extracellular receptor causes a transporter to open or close to allow particles through once a chemical signal binds.
 - a. G couple Protein
 - b. JAK Kinase
 - c. Tyrosine Kinase
 - d. Ligand Gated Ion Channel

5. An intracellular portion of this receptor phosphorylates intracellular Proteins.
 - a. G coupled Protein Receptor
 - b. Tyrosine Kinase
 - c. Ligand Gated Ion Channel
 - d. All of the following

6. Once Adenylyl cyclase is activated it
- Opens Ca^{2+} doors on the Sarcoplasmic Reticulum
 - Makes cAMP
 - Phosphorylates intracellular proteins
 - Causes a change in membrane potential
7. IP3 does which of the following?
- Opens Ca^{2+} doors on the Sarcoplasmic Reticulum
 - Activates target proteins
 - Both a and b
 - None of the above
8. An insulin receptor is an example a _____ receptor.
- Tyrosine Kinase
 - G couple Protein
 - Ligand Gated Ion Channel
 - JAK Kinase
9. Most cytokine receptors are an example a _____ receptor.
- Tyrosine Kinase
 - G couple Protein
 - Ligand Gated Ion Channel
 - JAK Kinase
10. Beta adrenergic receptors on cardiac contractile cells are an example a _____ receptor.
- Tyrosine Kinase
 - G couple Protein
 - Ligand Gated Ion Channel
 - JAK Kinase
11. Alpha adrenergic receptors on cardiac contractile cells are an example a _____ receptor.
- Tyrosine Kinase
 - G couple Protein
 - Ligand Gated Ion Channel
 - JAK Kinase
12. This type of receptor is involved in skeletal muscle contraction.
- Tyrosine Kinase
 - G couple Protein
 - Ligand Gated Ion Channel
 - JAK Kinase

MC Answers

1. c
2. c
3. e
4. d
5. b
6. b
7. a
8. a
9. d
10. b
11. b
12. c