Week 5 Assignment 5

The due date for submitting this assignment is passed. As per our record you have not submitted this assignment.

Questions:
1. What is a protein kinome database? 1 point
2. What is the Cell Line Encyclopedia? 1 point
3. What is the role of protein kinases in cancer? 1 point
4. What is the structure of a protein kinome database? 1 point
5. How can protein kinases be used to identify potential drug targets? 1 point

Answer:

1. A protein kinome database is a collection of information about protein kinases and their activities. It includes data on the expression, localization, and function of protein kinases in different cell lines and tissues. This information can be used to identify potential targets for drug development.

2. The Cell Line Encyclopedia is a database that contains information on more than 10,000 different human cell lines. It includes data on the genetic, epigenetic, and transcriptional profiles of these cell lines, which can be used to identify potential drug targets.

3. Protein kinases are enzymes that catalyze the transfer of a phosphate group from ATP (adenosine triphosphate) to a protein substrate. They are involved in a wide range of cellular processes, including cell growth, differentiation, and apoptosis. In cancer, protein kinases can become overactive, leading to uncontrolled cell growth and survival.

4. A protein kinome database typically includes information on the expression, localization, and function of protein kinases in different cell lines and tissues. This information can be used to identify potential drug targets. The database may also include information on the activities of individual protein kinases, such as their substrate specificity and substrate preference.

5. Protein kinases can be used to identify potential drug targets by analyzing the expression and activity of these enzymes in different cell lines and tissues. This information can be used to identify potential targets for drug development. For example, a protein kinase that is overactive in cancer cells may be a potential target for a drug that inhibits its activity and prevents uncontrolled cell growth.

Due on 2019-09-04, 23:59:07.

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Assignment's deadline
For all answers:
No, the answer is incorrect.

Answers:

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