Edexcel Biology IGCSE

5.d - Cloning

Flashcards

Describe the process of tissue culture (Higher)

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- Small cuttings (explants) are taken from the plant that you wish to clone
- The cuttings are placed in an agar dish containing growth hormones
- Once the new plants have grown enough, they are transferred to soil

State 2 benefits of tissue culture (micropropagation) (Higher)

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- Can produce many plants quickly
- Can produce lots of plants with desirable traits

Describe how animal cell cloning can be carried out (Higher)

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- The nucleus is removed from an unfertilised egg cell to create an enucleated cell
- The nucleus is removed from a cell from the animal you wish to clone
- The nucleus is placed in the enucleated cell and cell division is triggered by an electric shock
- Once the embryo gets big enough, it is placed in a surrogate mother

Give one example of a human protein made by a transgenic organism (Higher)

Give one example of a human protein made by a transgenic organism (Higher)

Insulin (made by modified E. coli)