

Separation of DNA fragments by electrophoresis

This article has been translated from WikiSkripta; ready for the **editor's review**.

Depending on the type of restrictase , there are one or more corresponding target sites (**palindromes**) on the genome of one cell , so the restrictase cleaves dsDNA into two or more restriction fragments, or opens circular dsDNA. A combination of restrictases can also be used with advantage. Even if the DNA is of an unknown sequence, the cleavage is reproducible, and from the overlapping sequences of the fragments, created by different restrictases, the fragments can be arranged, for example, even in the range of the entire genome.

Polyacrylamide gel electrophoresis or less cross-linked gels are routinely used to separate the resulting mixture of fragments , depending on how large the fragments are to be separated. Fragments differing in length by a single pair of nucleotides can also be distinguished.

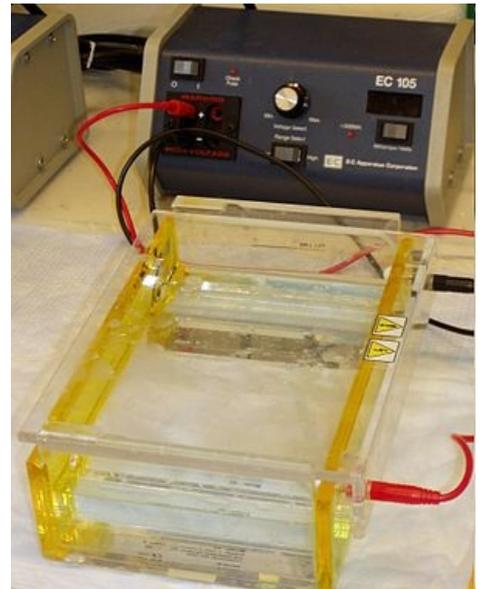
Links

Related articles

- Biochemistry of genetic engineering
- DNA cleavage
- Identification of restriction fragments
- Synthesis of artificial DNA
- Amplification and expression of the isolated gene in the host cell
- Restriction fragment length polymorphism

References

- ŠTIPEK, Stanislav. *Brief biochemistry: storage and expression of genetic information*. 1st edition. Prague: Medprint, 1998. ISBN 80-902036-2-0 .



Electrophoresis