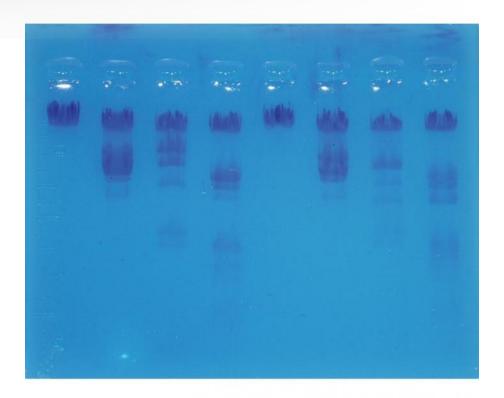
ELECTROPHORESIS OF DNA NO. 2



References: ELECCRDG, ELECCRDGSG



"Restriction map and genetic screening" Practical and theoretical objectives:

- DNA deposits in the wells of an agarose gel. Start of electrophoresis and gel staining
- Going further into the principle of DNA electrophoresis.
- Creation of a restriction map after electrophoresis (with the help of the instructions to establish the size of the fragments in base pairs).
- · Identification of the one-off mutation on lambda phage DNA mutated by restriction enzyme digestion
- Going further into the principle of genetic screening.

Proposed activity:

Perform electrophoresis on 8-well agarose gel of phage lambda DNA (the products supplied are digested). Comparison of restriction fragments obtained to identify a one-off mutation on a mutated lambda phage DNA.

Composition:

To make 4 gels of 25 ml

• 1.6 g of agarose



• 100ml of TAE buffer 10 x dose for 1L

Lambda phage, lambda phage lambda digested with EcoRI, digested with HindIII and digested twice with EcoRI and HindIII (75μ L of each)

Mutated lambda phage DNA, EcoRI digested lambda phage, HindIII digested and EcoRI and HindIII digested (75µL of each)Technical and educational instructions available on our website.

Necessary material:

DNA electrophoresis tank (for immersed gel)

70-110 V, 20my generator Water Bath or Microwave

Gloves

Micropipettes from 5 to 50µl and adapted cones

Conservation: 3 months DNA: in the freezer

Colour (protected from light), TAE buffer, sterile water: in the refrigerator

Reference	Tank	Dye
ELECCRDG	standard	Azure A
ELECCRDGSG	BlueGel	SafeGreen