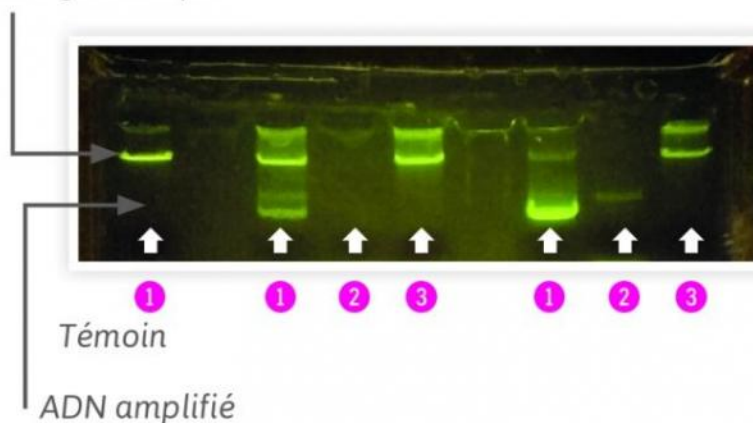


COMPLETION OF A RAPID PCR

Reference : PCRAPIDE

ADN génomique



- ① : tous les réactifs
- ② : tout sauf l'ADN
- ③ : tout sauf la TAQ

The complete kit PCR + electrophoresis most suitable for the 1st syllabus DNA replication

Cognitive objective:

The purpose of this kit is to understand the mechanism for semi-conservative replication of DNA through the carrying out of a PCR.

Proposed activity:

The protocol allows the realisation of 3 PCR tubes per pair of students:

- 1: all reagents
- 2: everything but DNA
- 3: everything except the TAQ

At the class level, a control tube comprising all reagents will be reserved without being placed in the thermal cycler.

Finally, the cycle can be started a second time on some tubes to compare a program of 8 min or 2 times 8 min.

In order to observe their PCR results as laboratory researchers do, students then perform a DNA electrophoresis of their own PCR product, with real-time visualisation of the migration using the BLUEGEL tank and SAFEGREEN stain (safe). Students will be able to visualise non-amplified genomic DNA, amplified (smaller) DNA, and primers.

This very simple lab allows students to really understand the role of each reagent, and how the PCR works.

Composition for 10 pairs of students, i.e. 30 PCR reactions (3 tubes per pair of students) and 10 gels from 9-26 wells:

- One sachet of "TAQ polymerase kit" (QSP 30 PCR)

- 1 sachet of agarose
- SafeGreen QSP 30 deposits
- 100 ml of TAE 10 X buffer
- 1 packet of 36 PCR microtubes
Technical and educational instructions.
Conservation: 3 months at -20 ° C