## IMMUNOLOGY: MANCINI TECHNIQUE

**Reference : MANCINI** 





## Mancini immunology kit for 20 pairs L'immunité adaptative

The Mancini technique or simple radial immunodiffusion test is based on the formation of immune complexes (antigen-antibody specific complex) using a petri dish coated with a constant height agar in which a serum containing anti-antigen antibodies is mixed.

The general interest of the action is to show that one can not only detect but also dose an antigen in a solution. It also makes it possible to approach the concept of standard range and have students build it using a spreadsheet directly from their experimental data.

## Aim of the MANCINI test we offer:

The assay consists of assaying a BSA antigen using an agar petri dish containing antibodies specific for this antigen.

This PW therefore takes place in 2 sessions:

- a first session where the petri dishes are poured and the deposits made;
- a second session during which the results are read, the standard range is carried out with a spreadsheet, the unknown concentration is determined.

Composition of the kit (12 to 20 pairs of students): 20 test dishes and 10 training dishes



- 30 petri dishes 5.5 cm diameter
- 30 die cutter droppers
- 2 g of agarose
- 2 tubes of 1 ml of anti-BSA antibodies
- 2 tubes of 1ml BSA (QSP for 3 standards, 1 unknown)
- 1 tube of 20 ml of PBS 10X
- Technical and educational instructions Necessary material:
- Variable volume micropipette 1-10 μL
- 10 µL micropipette cones
- 250 ml Erlenmeyer
- Microwave or hotplate
- Humid chamber
- Graduated ruler for measurement

