

## *Neisseria meningitidis*

### Serum for group determination

355-8704

#### DEFINITION

These immune sera are obtained by hyper-immunization of rabbits with reference strains corresponding to currently described groups of *Neisseria meningitidis*: groups Y, W135 and 29E.

These immune sera are presented in a kit: the Y, W135 and 29E pack.

#### PRESENTATION

**Pack Y, W135 and 29E** code 355-8704

- 3 bottles of lyophilisate q.s.p. 2 ml of each immune serum
- 1 bottle of 2 ml of phosphate buffer 1.5 M at pH 7.2 (10 x concentration).

#### STORAGE

- + 2°C to 8°C in a dry place.
- Expiration date and batch number are shown on the package.

#### METHODOLOGY

##### 1. PREPARATION OF IMMUNE SERUMS

###### • Preparation of buffer

The concentrated buffer is diluted 1/10 in sterile water, e.g.: collect 0.7 ml of concentrated buffer and make it up to 7 ml with sterile distilled water.

It is recommended that only the volume necessary for the manipulation is prepared.

###### • Re-hydration of immune serums

They are reconstituted with 2 ml of distilled water.

##### 2. METHOD OF AGGLUTINATION

###### • On slides

The culture of *meningococci* for grouping (obtained from a 24-hours culture on Mueller-Hinton medium) is placed in suspension in 0.2 ml of phosphate buffer 0.15 M at pH 7.2 (prepared in sterile distilled water).

Deposit a drop of each immune serum on a slide. Add an identical volume of bacterial suspension.

Shake the slide with gentle circular movements and observe the appearance of agglutination in under 2 minutes.

###### • Reading

Reading is best done by lighting the slide from underneath or against a black background.

###### • Interpretation

- Positive reaction: appearance of distinct and rapid agglutination in less than 2 minutes.
- Negative reaction: homogeneous suspension, no agglutination visible.

N.B.: Certain strains are auto-agglutinable or co-agglutinate with several immune sera. It is the agglutination that appears the most rapidly and the most distinctly that must be taken into account. The possible agglutination of *N. lactamica* should not be forgotten.

###### • On plates

In the case of rare groups, identification can be carried out on plastic plates (Limbro type). Using the test strain culture, obtained on Mueller-Hinton medium, make a suspension in a phosphate buffer 0.15 M at pH 7.2.

On each dish deposit:

- 50 µl of each of the immune sera Y, W135 and 29E,
- 50 µl of bacterial suspension. Agitate the plate for 4 minutes in a Kline agitator.

###### • Reading

This is done by looking at the plate from underneath.

N.B.: If the strain is non-agglutinable but nevertheless possesses the oxidant characters of *N. meningitidis*, it should be sent, accompanied with an information sheet, to:

Laboratoire des *Neisseria*  
Institut Pasteur  
25, rue du Docteur-Roux  
75015 PARIS - FRANCE

#### QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product. Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.