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Table 1: Interpretation of the reactions (+ = positive, - = negative, +/- = variable)

	Positive reaction	Negative reaction	*N. gonorrhoeae*	*N. meningitidis*	*N. lactamica*	*N. species*	*M. catarrhalis*
(A) ß-lactamase	Red	Yellow	+/-	-	-	+/-	+/-
(B) Glucose	Yellow	Red	+	+	+	+/-	-
(C) Maltose	Yellow	Red	-	+	+	+/-	-
(D) Saccharose	Yellow	Red	-	-	-	+/-	-
(E) ß-galactosidase	Yellow	White	-	-	+	-	-
(F) γ-glutamylaminopeptidase	Yellow[a]	White	-	+	-	+/-	-
(G) Polysaccharase	Black/ brown[b]	Yellow[a]	-	-	-	+[c]	-
(H) Tributyrinesterase	Yellow	Red	-	-	-	-	+

[a] The color might be pale yellow.
[b] Black/brown: The color might fade rapidly.
[c] *N. cinerea* negative and *N. subflava* variable. Exclusively negative test results are indicative of *N. cinerea*.

SSI DIAGNOSTICA

MINIBACT-N

NEISSERIA IDENTIFICATION KIT

EXPERIENCE MATTERS

ENGLISH

Intended use

Minibact-N is a ready-to-use kit for identification in 4 hours of pathogenic strains of oxidase-positive, Gram-negative diplococci (*Neisseria* species and *Moraxella catarrhalis*).

Description

The test is performed in strips of 8 microwells. One kit is sufficient for 12 identifications. The following materials are included in the kit:

- Microtiter strips placed in frame
- Lid for the frame
- An empty frame
- 1 bottle iodine reagent (polysaccharase test)
- 1 bottle nitrocefin reagent (ß-lactamase test)

Principle

The method requires an 18-24 hours pure culture of oxidase-positive, Gram-negative diplococci. Since the technique is based on the detection of preformed enzymes, identification is possible in 4 hours.

Identification is based on the following 8 reactions in row A to H:

(A) ß-lactamase
(B) Glucose
(C) Maltose
(D) Saccharose
(E) ß-galactosidase
(F) γ-glutamylaminopeptidase
(G) Polysaccharase
(H) Tributyrinesterase

The results are read as changes in color and interpreted according to table 1. The results can be read by naked eye.

Materials required but not provided

- Sterile saline
- McFarland no. 5 (0.05 mL 1% $BaCl_2$ + 9.95 mL 1% H_2SO_4)
- Pipette
- Inoculating loop
- Incubator (35-37°C)
- Whirly mixer

Procedure

1. Place the required number of microtiter strips in the frame.
2. Be sure the strips are placed correctly:
   (A) ß-lactamase = white disc
   (H) Tributyrinesterase = red disc
3. Prepare a dense suspension (equal to McFarland no. 5) of an 18-24 hours culture of the strain to be tested in 2 mL sterile saline. It is important that the suspension is homogeneous (stir on a whirly mixer for 10 seconds).
4. Add 200 µL suspension to each of the 8 wells.
5. Cover the frame with the lid and incubate at 35-37°C without CO_2 for 4 hours.
6. Read wells B, C, D, E, F and H directly according to table 1.
7. Add 1 drop of nitrocefin reagent to well A and read after 5-10 minutes according to table 1.
8. Add 2-3 drops of iodine reagent to well G and read immediately according to table 1. Please note that the color indicating a positive polysaccharase test may fade quickly but can be restored by further addition of Iodine solution.

Storage and shelf life

Store the kit between 2-8°C. Expiry date of the kit is printed on the label.

References

1. Berthelsen, L., Afprøvning af Minibact-N, Nyt om mikrobiologi, nr. 21, 1990.
2. Ison, C. A. et al., Evaluation of a new rapid identification kit for *Neisseria* species and *Moraxella catarrhalis*. ISSTDR-Meeting 1995.
3. Lewis D.A., Identification of *Neisseria gonorrhoeae* from clinical specimens. 11th meeting of the International Society for STD Research, New Orleans, Louisiana, USA 1995.

Information and ordering

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