

Catarrhalis Test Disc

REF CK9131

Intended Use

This test is used to differentiate *Moraxella catarrhalis* (positive) from *Neisseria* spp. (negative).

Background

Moraxella catarrhalis, once thought to be non-pathogenic, is now considered a possible agent in respiratory infections.

Because this organism can be found at the same sites as pathogenic *Neisseria* spp. and shares some physiological and biochemical characteristics, it is important to have a screening test for differentiation of *Moraxella catarrhalis* (1,2).

Used in conjunction with other tests, Catarrhalis discs achieve this by demonstrating the enzymatic hydrolysis of bromo-chloro-indolyl butyrate which creates a blue reaction. *Neisseria* spp. do not hydrolyze this substrate and will remain colorless.

The test involves smearing a portion of a freshly cultured colony onto a moistened disc and observing the development of a bright blue colour within 5 to 15 minutes for a positive reaction.

Precautions

This product is for in-vitro diagnostic use and should be used by properly trained laboratory professionals. Universal precautions should be taken in the handling, processing and discarding of all materials used to perform the test. Do not use reagents after the expiration date shown on the product label has expired.

Methods

Use a fresh 18-24 hour growth from an appropriate culture media (e.g. Chocolate Agar) as older cultures could be less metabolically active and results from these may be unreliable.

Slide:

Moisten a disc with a drop of sterile distilled water. The disc should be placed on a glass slide or similar for ease of handling and disposal.

Using a loop, wire or stick transfer the test colony onto the moistened disc and smear gently.

Leave the disc at ambient temperature for at 5 to 15 minutes; the appearance of a bright blue colour in the test area is a positive result.

Tube

Place a single disc into a tube and add 1 drop of sterile distilled water.

Using a loop, wire or stick transfer the test colony onto the moistened disc and smear gently.

Leave the disc at ambient temperature for at 5 to 15 minutes; the appearance of a bright blue colour in the test area is a positive result.

The positive colour reaction will darken on standing; do not hold the test for longer than 30 minutes as there is a risk of false positive results developing

Results

Positive Reaction – a colour change to bright blue, leave at ambient temperature for 5 to 15 minutes

Negative Reaction – no colour change.

Limitations

This test is part of an overall identification scheme and further confirmatory tests are necessary. While the Catarrhalis test is positive for *M. catarrhalis* other species of *Moraxella* are also positive so this test cannot be used alone to differentiate the various *Moraxella* spp.

Quality Control

A quality control should be undertaken daily or immediately prior to use.

Bacteria

Positive control-

Pseudomonas aeruginosa ATCC 27853

Negative controls-

Escherichia coli ATCC 25922

and/or

Neisseria gonorrhoea ATCC 19424

Shelf Life & Storage

The expiry date, storage temperature (ambient) and storage conditions are indicated on the outer package label.

Materials provided

Each pack contains 50 test discs impregnated with a solution of bomo-chloro-indolyl butyrate

Materials required but not provided

Sterile loops or needles

Sterile distilled water

Glass slide, petri dish

Test tube

References

Standards Unit, National Infection Service, PHE. UK SMI, ID11-Identification of *Moraxella* species and Morphologically Similar Organisms, Issue 3, 03.02.15.

Standards Unit, Microbiology Services, PHE. UK SMI, ID6-Identification of *Neisseria* species, Issue 3, 26.06.15.

1. Riou, J.Y. et al.:Hydrolyse de la tributyrine par les *Neisseria* et les *Branhamella*. Ann.Microbiol. (Paris). 1981;132(2); 159-169.

2. Riou, J.Y., Guibourdenche, M. *Branhamella catarrhalis*. New Methods of bacterial diagnosis. Drugs. 1986; 31 Suppl. 3; 1-6.

	Catalogue number
	Batch number
	Use by date
	In-Vitro Diagnostic device
	Contains sufficient for <n> tests
	Temperature storage limitations
	Consult instructions for use
	Manufacturer

Issue	Date	Comments
4	09/08/2022	IFU format revision.

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