MAST ID™
OXIDASE STRIPS

A rapid strip test for detection of the oxidase reaction

Introduction

The MAST ID™ OXIDASE STRIP test is based on the method of Kovacs\(^1\) but with the addition of ascorbic acid to reduce auto-oxidation of the reagent, as described by Steel in 1962.\(^2\)

This test gives a positive reaction, in the form of a colour change, in the presence of cytochrome oxidase, an enzyme that is characteristically abundant in \textit{Pseudomonas} and \textit{Neisseria} species.\(^3\)

It is this abundance of cytochrome oxidase that has led to the oxidase strip test becoming a practical and specific laboratory test as noted by Gaby and Hadley.\(^3\)

MAST ID™ OXIDASE STRIPS can be used to confirm the identity of organisms growing on MAST ID™ Pseudomonas Agar (IDM36), a selective medium for the presumptive identification of \textit{Pseudomonas} spp.

Description

Filter paper strips 5.7cm by 0.6cm which are printed to identify the test, positive control and negative control areas. The strips are impregnated with oxidase reagent, (N,N-Dimethyl-p-Phenylenediamine) and ascorbic acid at appropriate concentrations.

In Use

Place the paper strip on a clean microscope slide and remove a suspect colony from the test culture using either a wooden applicator stick or a platinum loop. False positives may result from the use of loops made from nichrome wire.

Gently rub this colony onto the test area of the strip. Similarly, apply a sample from a known oxidase negative and a known oxidase positive strain to the appropriate areas of the strip to act as controls.

If the organism is positive a deep blue colour develops within 10 seconds. Organisms that produce a colour change after 10 seconds or remain colourless are considered to be negative.

Media with a high proportion of blood may give false positives and so should also be avoided.\(^4\)

Packaging and Ordering Details

25 strips in a screw-top tin with silica gel sachet.

Order Code: ETO4

References