

Product Specification Sheet

Brilliance™ MRSA 2 Agar

Intended Usage: A selective medium for the screening of clinical samples for the presence of Methicillin Resistant *Staphylococcus aureus* (MRSA).

For professional use only.

PO5310A	
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Thermo Scientific™ Brilliance™ MRSA 2 Agar

Form of Product	Poured plate
Storage	2 – 12°C, dark
Filling weight	17 g ± 5 %
Packaging	10 plates wrapped in film
pH	7.3 ± 0.2
Appearance	Light ivory, opaque
Shelf life	8 weeks
Intended Usage	A selective medium for the screening of clinical samples for the presence of Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA).
Technique	For professional use only. Depends on the different methods. For information see product information.

Typical formulation*	g/l
Peptone mix	20.0
Carbohydrate	4.0
Salts	5.0
Chromogenic mix	0.2
Antibiotic cocktail	20.0 ml
Kaolin	8.0
Agar	13.0

*Adjusted as required to meet performance standards.

Quality Control

1. Control for general characteristics, labelling and printing.

2. Contamination check
≥ 72 h @ 20 – 25 °C, aerobic
≥ 72 h @ 30 – 35 °C, aerobic

3. Microbiological control

Positive Control	Growth
Inoculum 50 – 120 colony forming units (cfu), quantitative Incubation conditions: 18 – 24 h @ 36 ± 1°C, aerobic	
<i>Staphylococcus aureus</i> ATCC® 33591™	1 – 2 mm, blue colonies.
Colony counts shall be ≥ 50% of the control medium TSA.	

Specificity Control	Growth
Inoculum 10³ – 10⁴ cfu, qualitative, control medium COL+SB Incubation conditions: 18 – 24 h @ 36 ± 1°C, aerobic	
<i>Bacillus licheniformis</i> ATCC® 14580™	Growth of small rose colonies.

Negative Controls	Growth
Inoculum ≥ 10⁴ cfu, quantitative, control medium TSA. Incubation conditions: 18 – 24 h @ 36 ± 1°C, aerobic	
<i>Staphylococcus aureus</i> ATCC® 29213™	Total inhibition (≤ 10 cfu).
<i>Pseudomonas aeruginosa</i> ATCC® 27853™	Total inhibition (≤ 10 cfu).
Inoculum 10⁴ – 10⁵ cfu, qualitative, control medium COL+SB Incubation conditions: 18 – 24 h @ 36 ± 1°C, aerobic	
<i>Proteus mirabilis</i> ATCC® 29906™	No growth.

ATCC® registered trademark of American Type Culture Collection.

Background

The importance of screening as part of an effective programme to limit the spread of MRSA is well recognised. Speed and accuracy of results are critical aspects of this. Colonised patients can be accurately targeted for isolation and appropriate treatment as early as possible. Resource is not wasted on patients who are not colonised.

A variety of media are used to screen for MRSA. Most of these have issues of sensitivity or specificity and all require up to 48 hours incubation.

Description

Brilliance™ MRSA 2 Agar utilises a chromogen to yield a blue colour as a result of phosphatase activity. This enzyme is present in all MRSA. To allow the medium to differentiate MRSA accurately, it contains a combination of antibacterial compounds designed to inhibit the growth of a wide variety of competitor organisms and MSSAs. Through the inclusion of a novel pink counter-stain, non-target organisms that do grow are more easily distinguished from distinctive MRSA colonies.

Method of use

Brilliance™ MRSA 2 Agar can be inoculated from a screening swab taken from hospital patient or staff, from an isolated colony or from a liquid suspension. MRSA grows as denim-blue colonies which are very easy to read against the light-coloured, opaque background. Non-target organisms grow as pink/ purple or white colonies.

The medium should be allowed to warm to room temperature before inoculation. Incubate for 18 – 24 hours at $36 \pm 1^\circ\text{C}$. There is no need to re-incubate. This allows a rapid response, so enabling the patient to receive the most appropriate treatment as early as possible.

Blue colonies are presumptive positive for MRSA and can be confirmed with Staphytect™ Plus Latex Agglutination Test (DR0850B/M) or Dryspot™ Staphytect Plus (DR0100M), and PBP2' Latex Agglutination Test (DR0900A).

Limitations

This product contains fermentable carbohydrate. Fermentation of this sugar is likely to cause a localised drop in pH which may result in the formation of pale blue halos around some colonies. This should not be confused with a positive reaction.

The medium must not be used beyond the stated expiry date, or if the product shows any sign of deterioration.