

Contact Slide 10

Rose Bengal CAF Agar + Neutralizing / Vogel Johnson Agar

Flex Dip-slide with selective media for detection of pathogenic staphylococci, yeasts and moulds.

DESCRIPTION

Contact Slide 10 is a ready-to-use device with two different media coated onto a plastic support used for the microbial monitoring of surfaces and liquids even in the presence of residues of disinfectants.

Rose Bengal CAF agar allows the isolation and enumeration of yeasts and moulds.

Vogel Johnson agar is used for the isolation and enumeration of coagulase-positive, mannitol-utilizing staphylococci.

TYPICAL FORMULA			
Rose Bengal CAF Agar + Neutralizing Side 1	(g/l)	Vogel Johnson Agar Side 2	(g/I)
Enzymatic Digest of Soybean Meal	5.0	Enzymatic Digest of Casein	10.0
Glucose	10.0	Yeast Extract	5.0
Monopotassium Phosphate	1.0	Dipotassium Hydrogen Phosphate	5.0
Magnesium Sulphate	0.5	D-Mannitol	10.0
Rose Bengal	0.05	Lithium Chloride	5.0
Chloramphenicol	0.1	Glycine	10.0
Agar	15.0	Phenol Red	0.025
Neutralizing	*	Potassium Tellurite	0.2
Final pH 7.2 ± 0.2		Agar	15.0
		Final pH 7.2 ± 0.2	

^{*}Histidine, 1.0 Lecithin, 0.7 Tween 80, 5.0 Sodium Thiosulfate, 0.5

METHOD PRINCIPLE

Rose Bengal CAF Agar + Neutralizing includes Rose Bengal and Chloramphenicol as selective agents to inhibit bacterial growth while restricting the colony sizes of rapidly growing moulds. Rose Bengal is also a stain and it is incorporated in the cells of yeasts and moulds, turning these colonies pink.

<u>Vogel Johnson Agar</u> includes tellurite, lithium chloride and a high glycine concentration which are inhibitory for most bacteria other than staphylococci. Phenol red is the pH indicator incorporated to show acid production. Some organisms, such as *Staphylococcus aureus*, reduce tellurite to metallic tellurium resulting in growth as black colonies.

TEST PROCEDURE

- 1. Unscrew and extract the slide from its cylindrical container. Avoid any contact with the agar surface.
- 2. For surfaces monitoring, flex the cap forming a 90° angle and press each side of the slide firmly against the surface to be examined for 10 seconds. The surface area sampled with one side is about 12.5 cm². Alternatively, use a swab for sampling the area, afterwards roll the swab gently over the agar surface. For examination of liquids, hold the slide by the cap and immerse it completely into the test fluid.
- 3. Reinsert the slide into its tube, screw it tight and incubate at $35 \pm 2^{\circ}$ C for 24 h. Record the count on Vogel Johnson Agar prior to continue incubation at $30 \pm 1^{\circ}$ C for other 5 days. Temperature and time of incubation may be varied to suit specific organism requirements for growth.

RESULTS INTERPRETATION

Organisms that grow as black colonies surrounded by a yellow zone on Vogel Johnson Agar (**Side 2**) may be presumed to be *Staphylococcus aureus*. Prolonged incubation may result in the growth of black coagulasenegative colonies and if these organisms also ferment mannitol they may be falsely identified from their appearance as *S. aureus*. In these circumstances further tests are necessary for final identification.

Total number of colonies grown on Rose Bengal CAF Agar + Neutralizing (**Side 1**) gives an assessment of the fungal contamination.

APPEARANCE

Side 1. Slightly opalescent, bright pink.

Side 2. Slightly opalescent, red.

STORAGE CONDITIONS

10-25°C away from light, until the expiry date on the label. Eliminate if signs of deterioration or contamination are evident.

SHELF LIFE

6 months.

QUALITY CONTROL

Slides are inoculated with the microbial reference strains shown below.

Inoculum for productivity: 50-100 CFU. Inoculum for selectivity: 10⁴-10⁶ CFU.

Rose Bengal CAF agar (side 1)

Strain		Incubation	Growth
Escherichia coli	ATCC® 25922	30 ± 1°C/	Partially to completely inhibited
Staphylococcus aureus	ATCC® 25923	3-5 d	Partially to completely inhibited
Candida albicans	ATCC® 10231		Good, pink colonies
Aspergillus niger	ATCC® 16404		Good
Saccharomyces cerevisiae	ATCC® 9763		Good, pink colonies

Vogel Johnson agar (side 2)

Strain		Incubation	Growth
Escherichia coli	ATCC® 25922	35 ± 2°C /	Inhibited
Staphylococcus aureus	ATCC® 25923	24 h	Good, black colonies with yellow zones
Enterococcus faecalis	ATCC® 29212		Inhibited
Staphylococcus epidermidis	ATCC® 12228		Poor to fair, translucent of even black colonies without a yellow zone

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used by properly trained operators only.

DISPOSAL OF WASTE

Disposal of waste mast be carried out according to national and local regulation in force.

BIBLIOGRAPHY

- ISO 18593:2018 Microbiology of the food chain Horizontal methods for surface sampling.
- Marshall R.T. ed. (1993). Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
- Jarvis B. (1973). Comparison of an improved rose bengal-chlortetracycline agar with other media for the selective isolation and enumeration of molds and yeasts in foods. J. App. Bacterial. 36:723-727.
- Koburger J.A. (1972). Fungi in foods. Effect of plating medium pH on counts. J. Milk Food Technol. 35:659-660.
- Vogel R.A. and Johnson M. (1960) A modification of the tellurite-glycine medium for the use in the identification of Staphylococcus aureus. Publ. Hlth. Lab., 18; 131-133.
- Zebovitz E., Evans J.B. and Niven C.F. (1955) Tellurite-glycine agar, a selective plating medium for the quantitative detection of coagulase positive staphylococci. J. Bact., 70; 686-690.

Product	Packaging	Ref.
Contact Slide 10	20 slides	525452
Contact Slide 10	120 slides	53545

TABLE OF SYMBOLS LOT Batch code Keep away from light Manufacturer Use by Fragile, handle with care Caution, consult Instruction For Use Do not reuse



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