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Product Information

16026 Brilliant Green Phenol Red Lactose Sucrose Agar (BPLS Agar)

Selective medium for the isolation of salmonellae, with the exception of *S. typhi*, from pathological material, stool, urine, food etc.

Composition:

Ingredients	Grams/Litre
Mixed peptone	10.0
Yeast extract	3.0
Lactose	10.0
Sucrose	10.0
Sodium chloride	5.0
Phenol red	0.08
Brilliant green	0.0125
Agar	13.0
Final pH 6.9 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :
Dissolve 51 g in 1 litre distilled water. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:
In this medium fermentation of lactose and sucrose is detected by color change of the pH indicator phenol red, which changes its colour to yellow in acidic conditions. This allows identification of accompanying, lactose-positive and/or sucrose-positive microorganisms. Salmonellae are not able to ferment lactose or sucrose.The indicator exhibits a deep red colour in the alkaline range. The growth of the accompanying gram-positive microbial flora like *Salmonella typhy* and *Shigella* is largely inhibited by brilliant green. ADAM (1966) recommended that 2g/l sodium deoxychlolate (Cat. No. 96949) should be added to the culture medium to inhibit the growth of Proteus colonies.

Cultural characteristics after 40-48 hours at 35ºC.

Organisms (ATCC)	Growth	Color of Colony/Medium
Salmonella typhimurium (14028)	++	pink to red
Salmonella choleraesuis (13312)	++	pink to red
Sallmonella enteritidis (13076)	++	pink to red
Escherichia coli (25922)	+++	yellow
Staphylococcus aureus (25923)	-	-
Enterococcus faecalis (29212)	-	-
Bacillus subtilis (6633)	-	-

References:
1. M.A. Morinigo et al., Isolation of salmonellae from environmental samples, J. Appl. Bact. 66, 353 (1989)
2. D. ADAM, Zusatz von Natriumdesoxycholat zum Brilliantgrün-Phenolrot-Agar nach Kristensen-Kauffmann zur Hemmung des Schwärmvermögens von Proteuskeimen, Ärztl. Lab. 12, 245 (1966).
3. European Pharmacopeia ll, Chapter Vlll. 10
4. United States Pharmacopeia XXlll, Chapter "Microbial Limit Tests" (1995)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.