

# Phenol Red Glucose Broth

Medium used for the identification and determination of dextrose fermentation.

## • CONTENTS (Liter)

Pancreatic Digest of Casein	10.0 g
Sodium Chloride	5.0 g
Phenol Red	0.018 g
Glucose	5.0 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 20.02 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolve. Mix well. Sterilize by autoclave at 118°C for 15 minutes. Pour into tubes with durham tubes.

## • INTERPRETATION

Phenol Red Glucose Broth is a medium used for the identification and determination of dextrose fermentation. Pancreatic digenst of casein provides nitrogen, vitamins, minerals and amino acids in the medium. Sodium chloride maintains the osmotic balance. Phenol red is a pH indicator. Glucose is a carbohydrate providing carbon and energy.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 36 ± 1°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pinkish beige

### Prepared medium

Appearance: clear to very slight opalescent

Color: orange red to red

Incubation conditions: 36 ± 1°C / 18 - 48 hours

Microorganism	ATCC	Growth	Characteristics
<i>Enterobacter aerogenes</i>	13048	good	yellow with gas
<i>Escherichia coli</i>	25922	good	yellow with gas
<i>Enterococcus faecalis</i>	29212	good	yellow
<i>Klebsiella pneumoniae</i>	27736	good	yellow with gas
<i>Proteus vulgaris</i>	6059	good	yellow with gas
<i>Pseudomonas aeruginosa</i>	27853	good	red
<i>Salmonella typhimurium</i>	14028	good	yellow with gas

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Baron, E.J., L.R. Peterson, and S.M. Finegold. 1994. Bailey & Scott's diagnostic microbiology, 9th ed.
2. Murray, P.R., E.J. Baron, M.A. Tenover, and R.H. Tenover. 1995. Manual of clinical microbiology, 6th ed.
3. Holt, G.J., N.R. Krieg, P.H.A. Sneath, J.T. Staley, and S.T. Williams. 1994. Bergey's manual of determinative bacteriology, 9th ed.
4. MacFaddin. 2000. Biochemical tests for identification of medical bacteria, 3rd ed., Lippincott Williams & Wilkins, Baltimore, Md.
5. Forbes, Sahm and Weissfeld. 1998. Diagnostic microbiology, 10th ed. Mosby, Inc., St. Louis, Mo. 3. Vera. 1950. Am. J. Public Health, 40:1267.
6. Ewing. 1986. Edwards and Ewing's identification of Enterobacteriaceae, 4th ed. Elsevier Science Publishing Co., New York, N.Y.
7. Holt, Krieg, Sneath, Staley and Williams (ed.). 1994. Bergey's Manual™ of determinative bacteriology, 9th ed. Williams & Wilkins, Baltimore, Md.
8. Murray, Baron, Tenover and Tenover (ed.). 1999. Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.

## • PACKAGE

Cat. No : MB-P0619 Phenol Red Glucose Broth	500 G
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