ProductInformation

PHENOL RED LACTOSE BROTH

Product Number **P9601**

Product Description
Phenol Red Lactose Broth is used for the determination of fermentation of lactose in the differentiation of microorganisms. The ability of an organism to ferment a specific carbohydrate in the basal medium, results in the production of acid and gas, which helps in the differentiation between the genera and species of bacteria. Phenol Red Lactose Broth is a complete medium with lactose. Proteose peptone and beef extract provide nitrogenous nutrients to the organisms. Phenol red is the pH indicator, which turns yellow at acidic pH. Sodium chloride maintains osmotic equilibrium. Gas formation is seen in Durham's tubes.

Components

Item	g/L
Proteose Peptone	10.00
Beef Extract	1.00
Sodium Chloride	5.00
Phenol Red	0.018
Lactose	5.00

Final pH (at 25°C) 7.4 ± 0.2

Precautions and Disclaimer
For laboratory use only. Not for drug, household or other uses.

Preparation Instructions
Suspend 21 grams of Phenol Red Lactose Broth in 1000 mls of distilled water. Heat to dissolve the medium completely. Dispense into tubes containing inverted Durham's tubes and sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

Storage
Store the dehydrated medium at 24°C and the prepared medium at 2-8°C.

Product Profile

Appearance	Pink colored, homogeneous, free flowing powder.
Color and Clarity	Red colored, clear solution without any precipitate.
Cultural Response	Cultural characteristics are observed after 18-24 hours at 35-37°C.

Organisms	Growth	Acid	Gas
Citrobacter freundii	luxuriant	+	+
Enterobacter aerogenes	luxuriant	+	+
Escherichia coli	luxuriant	+	+
Klebsiella pneumoniae	luxuriant	+	+
Proteus vulgaris	luxuriant	-	-
Salmonella typhimurium	luxuriant	-	-
Salmonella typhi	luxuriant	-	-
Serratia marsecense	luxuriant	-	-
Shigella flexneri	luxuriant	-	-

References

1. MacFaddin, J., (1985). Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams and Wilkins. Baltimore, Maryland.

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