

**YEAST GLUCOSE BEEF AGAR****TM 497**

for cultivation of lactic streptococci for determining growth characteristics

Composition

Ingredients	Gms/Ltr.
Peptic digest of animal tissue	10.000
Beef extract	10.000
Yeast extract	3.000
Sodium chloride	5.000
Dextrose	5.000
Agar	15.000

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct Sunlight.

Instructions for Use

Dissolve 48.00 gms in 1000 ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

Appearance: Light amber coloured clear to slightly opalescent

PH (at 25°C): 7.0 ± 0.2

Principle

YEAST GLUCOSE BEEF AGAR is used for cultivation of lactic streptococci for determining growth characteristics. Lactic acid bacteria comprise a clad of gram positive low-GC, non-sporulating, acid tolerant non-respiring rod or cocci that are associated by their common physiological and metabolic characteristics. These bacteria produce lactic acid as the major metabolic end product of carbohydrate fermentation. The industrial importance of the LAB is evidenced by their generally regarded safe (GRAS) status, due to their ubiquitous appearance in food and their contribution to the healthy microflora of human mucosal surfaces. The genera that comprise the LAB are at its core *Lactobacillus*, *Leuconostoc*, *Pediococcus*, *Lactococcus*, and *Streptococcus* as well as the more peripheral *Aerococcus*, *Teragenococcus*, *Vagococcus*, and *Weisella*.

Peptic digest of animal tissue, beef extract and yeast extract provides the necessary growth factors and nutrients. Dextrose serves as energy source. Sodium chloride helps to maintain osmotic balance.

Interpretation

Cultural characteristics observed after incubation at 35 - 37°C for 18 - 24 hours.



PRODUCT DATA SHEET

Microorganisms	ATCC	Growth
<i>Lactobacillus lactis</i>	8000	Good-luxuriant
<i>Streptococcus cremoris</i>	19257	Good-luxuriant
<i>Streptococcus thermophilus</i>	14485	Good-luxuriant
<i>Leuconostoc dextranicum</i>	-	Good-luxuriant

References

1. Holzapfel, WH; Wood, BJB (eds.). (1998). The genera of lactic acid bacteria, 1st ed., London Blackie Academic & Professiona.
2. Atlas R. M, 2004, Handbook of Microbiological Media, Lawrence C. Parks (Ed.), 3rd Edition, CRC Press.
3. Salminen, S.; von Wright, A; and Ouwehand, AC (eds.). (2004). Lactic Acid Bacteria: Microbiological and Functional Aspects, 3rd ed., New York: Marcel Dekker, Inc.