

PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

Cat No. PD219 - LB + KANAMYCIN (50 mg/L)

Intended Use:

Luria Agar (LB Agar) with Kanamycin Disulfate Salt is a selective, nutrient-rich medium widely used in molecular biology and microbiology for the cultivation and selection of bacteria, most commonly *Escherichia coli* that carry plasmids encoding resistance to kanamycin.

Principle and Uses:

LB Agar provides peptides, amino acids, vitamins, and salts for robust bacterial growth.

Kanamycin acts as a selective agent, inhibiting the growth of bacteria that do not possess a kanamycin resistance gene (usually carried on a plasmid). Only kanamycin-resistant bacteria will grow and form colonies.

Application: This medium is routinely used for:

- Selecting and maintaining recombinant *E. coli* strains transformed with plasmids containing a kanamycin resistance gene.
- Screening for successful genetic transformations or cloning experiments.

Composition

Tryptone - 10.0 g/L

Yeast extract - 5.0 g/L

Sodium chloride - 5.0 g/L

Agar - 15.0 g/L

Kanamycin Disulfate Salt - 50 mg/L

Storage: 2-8°C

Appearance: light amber

pH Range: 6.8 - 7.2

Package contents: 10 plates in a package

Exp. Date: Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Waste Disposal

After interpretation all plates should be destroyed by standard incineration methods.

Performance Testing Results

GPT: Inoculum 10-100 cfu

Inhibitory properties: inoculum 10000 cfu

Test	ATCC	Incubation Temp. (°C)	Incubation Cond	Reaction 1
<i>E. coli kanamycin resist. A-821</i>	WS	33-37 °C	Aerobic, 24 hours	Growth
<i>E. coli kanamycin resist. JM109</i>	W.S	33-37 °C	Aerobic, 24 hours	Growth
<i>Escherichia coli</i>	25922	33-37 °C	Aerobic, 24 hours	Partially inhibited