

Product Data Sheet

DRIGALSKI LITMUS LACTOSE AGAR

Product No. GB-DCM-00180-1A

INTENDED USE

For detection and differentiation of enteric pathogens.

PRODUCT SUMMARY

Drigalski Litmus Lactose Agar is formulated as per Drigalski and Conrad as a differential medium for the detection of enteric pathogens from water, meat, milk and other food materials.

Product Specifications

Ingredients	Gms / Ltr
Peptone	7.000
Sodium chloride	5.000
Lactose	15.000
Litmus	1.200
Agar	13.000

PRINCIPLE

The medium consists of lactose as the source of carbon and fermentable carbohydrate. Peptone supplies essential nitrogenous nutrients to the microorganisms. Litmus is the pH indicator in the medium. Lactose fermenters produce acid and thus change the colour of litmus to red forming red, colonies. Lactose non-fermenters form blue colonies on the medium. Inoculate culture from primary fermentation tubes showing gas either by four-quadrant streaking on the medium or by serial dilution and pour plate technique.

INSTRUCTION FOR USE

- Dissolve 41.2 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Fair-good	20-40%	Orange-red	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Orange-red	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	>=70%	Blue	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	Blue	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good	20-40%	Orange-red	20-40%	18-24 Hours

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder.
 Appearance of prepared medium: Purplish blue coloured, clear to slightly opalescent gel forms in Petri plates.
 pH (at 25°C) : 7.4±0.2

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

This product is for research use only.