

TM 705 – CRYSTAL VIOLET LACTOSE AGAR

INTENDED USE

For differentiation of pure cultures of pathogenic and nonpathogenic Staphylococci.

PRODUCT SUMMARY AND EXPLANATION

Crystal Violet Lactose Agar was recommended by Chapman for the differentiation of pure cultures of pathogenic from nonpathogenic strains of Staphylococci. The toxicity of Staphylococci is estimated on the basis of their pigment production, haemolytic and coagulating characteristic. In the study of the correlation between haemolytic and coagulase activities, animal inoculation and other tests, Chapman and Berens reported that Staphylococci produced different coloured growths when cultured on Crystal Violet Agar. Haemolytic and coagulating strains produced purple to violet colour whereas non-hemolytic and non-coagulating strains produced white colonies after incubation. Crystal violet inhibits most of the gram-positive organisms and is markedly inhibitory to Staphylococci. A fair growth can be obtained at a 1: 300,000 concentration of the dye when the medium is inoculated heavily. So, this medium is used for study of pure cultures where a mass inoculation can be used rather than for primary isolation.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	5.000
Beef extract	3.000
Lactose	10.000
Crystal violet	0.0033
Agar	15.000

PRINCIPLE

The media contains proteose peptone and beef extract as sources of carbon, nitrogen, vitamins and minerals. Lactose is the carbon and energy source.

INSTRUCTION FOR USE

- Dissolve 33 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.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light tan homogeneous free flowing powder.
Appearance of prepared medium	: Light purple coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.8±0.1

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70%	Purple	35-37°C	40-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Fair-good	20-40%	Light yellow	35-37°C	40-48 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	Fair-good	20-40%	Purple/ very slightly	35-37°C	40-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	None-poor	0-10%	Colourless	35-37°C	40-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

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.

REFERENCES

1. Chapman, 1936, J. Bact., 32:199.
2. Chapman, Berens. Peters and Curcio, 1934, J. Bact., 28:343.
3. Chapman and Berens, 1935, J. Bact., 29:437.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Barkstrasse 10, 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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