

## TMV 405 – C.L.E.D. AGAR (W/ BROMO THYMOL BLUE) (BROLACIN AGAR) (VEG.)

### INTENDED USE

For isolation and differentiation of urinary pathogens by lactose fermentation for isolation and differentiation of urinary pathogens by lactose fermentation.

### PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using vegetable peptones in place of animal peptones which are free from BSE/TSE risks. These media are the modification of C.L.E.D. Agar as devised by Mackey and Sandy. The original experiments and trials to control the swarming of *Proteus* led to formulate C.L.E.D. (Cystine-Lactose-Electrolyte-Deficient) medium which contained L-Cystine promoting growth of coliforms. Lactose is incorporated serving as an immediate readily available carbon source required for growth of urinary pathogens. Incorporation of pH indicator bromothymol blue helps in identifying lactose fermenting colonies. In case of very low pH of urine, around 5.0, a low bacterial count is often reported. This medium does not support growth of *Shigella* species.

### COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	4.000
Veg hydrolysate	4.000
Veg extract	3.000
Lactose	10.000
L-Cystine	0.128
Bromothymol blue	0.020
Agar	15.000

### PRINCIPLE

Veg peptone, Veg hydrolysate and Veg extract provides necessary nutrient required for luxuriant growth of organism. Appropriate dilutions of urine can be spread on surface of C.L.E.D Veg Agar to enumerate number of bacteria in urine sample under test (Bacteriuria).

### INSTRUCTION FOR USE

- Dissolve 36.15 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	: Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Appearance of prepared medium	: Green coloured, very slightly opalescent gel forms in petri plates.
pH (at 25°C)	: 7.3±0.2

### INTERPRETATION



Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	>=50%	Slight yellowish or greenish	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	>=50%	Yellow, opaque, centre slightly deeper yellow	35-37°C	18-24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-luxuriant	>=50%	Yellow to whitish blue	35-37°C	18-24 Hours
<i>Proteus vulgaris</i>	13315	50-100	Good-luxuriant	>=50%	Blue	35-37°C	18-24 Hours
<i>Salmonella Typhi</i>	6539	50-100	Good-luxuriant	>=50%	Bluish	35-37°C	18-24 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Good-luxuriant	>=50%	Deep yellow	35-37°C	18-24 Hours

#### PACKAGING:

In pack size of 100 gm and 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. Mackey and Sandys, 1965, Br. Med. J., 2:1286.
2. MacKey and Sandys, 1966, Br. Med. J., 1:1173



 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 Berkstrasse 10 48163 Münster, 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**  
**Revision: 08 Nov., 2019**