CLED Medium Catalog : HB7031-2-5k

CLED Agar is used for the isolation, enumeration and presumptive identification of microorganisms from urine

Approximate Formula:

Ingredients	gm/liter
Pancreatic digest of gelatin	4.0
Pancreatic digest of casein	4.0
Beef extract	3.0
Lactose	10.0
L-Cystine	0.128
Bromothymol blue	0.02
Agar	15.0

Final pH7.3±0.2 at 25℃

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 36.2g of the medium in one liter of deionized or distilled water. Mix well and heat with frequent agitation to completely dissolve powder. Sterilize in the autoclave at 121℃ (15 lbs.) for 15 minutes.

Principle and Interpretation:

CLED Medium (Cysteine-Lactose-Electrolyte-Deficient Medium) is recommended for use in plates or in urine dipsticks for detecting significant bacteria by quantitative culture of urine. Inoculation of the medium must be done as soon as possible after collection, for reliable results. Confluent or semi-confluent growth of bacteria will occur on the surface of the dipstick medium when bacterial counts are greater than 10^5 per mL of urine, as confirmed by plates inoculated by the calibrated-loop or duplicate-dilution pour-plate methods.

Peptones, pancreatic digests of gelatin and casein, and beef extract provide nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential growth nutrients. Lactose is the fermentable sugar. L-cystine supports the growth of dwarf coliform colony. Bromo thymol blue is the pH indicator which turns yellow at acidic pH.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of blue-green transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

CLED Medium must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 35±2℃ for 18-24 hours.

Microorganism	Strains Number	Growth	Remarks
Escherichia coli	ATCC 25922	luxuriant	Yellow colonies
Staphylococcus Aureus	ATCC 6538	luxuriant	Deep yellow colonies
Proteus vulgaris	ATCC 13315	luxuriant	Blue colonies with inhibited swarming
Enterococcus faecalis	ATCC 29212	luxuriant	Yellow colonies

Reference:

1. Sandys. 1960. J. Med. Lab. Technol. 17:224.
2. Mackey and Sandys. 1965. Br. Med. J. 2:1286.
3. Barry, Smith and Turck. 1975. Cumitech 2, Laboratory diagnosis of urinary tract infections. Coord. ed., Gavan. American Society for Microbiology, Washington, D.C.
4. Clarridge, Pezzlo and Vosti. 1987. Cumitech 2A, Laboratory diagnosis of urinary tract infections. Coordinating ed., Weissfeld. American Society for Microbiology, Washington, D.C.

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