

KLIGLER IRON AGAR (5 ML)

INTENDED USE:

Kligler Iron Agar is used for the differentiation of members of the Enterobacteriaceae on the basis of their ability to ferment dextrose and lactose and to liberate sulfides.

PRINCIPLE AND INTERPRETATION:

Kligler Iron Agar, in addition to casein and meat peptones, contains lactose and dextrose which enable the differentiation of species of enteric bacilli due to color changes of the phenol red pH indicator in response to the acid produced during the fermentation of these sugars. The combination of ferric ammonium citrate and sodium thiosulfate enables the detection of hydrogen sulfide production. Lactose nonfermenters (e.g., Salmonella and Shigella) initially produce a yellow slant due to acid produced by the fermentation of the small amount of dextrose. When the dextrose supply is exhausted in the aerobic environment of the slant, the reaction reverts to alkaline (red slant) due to oxidation of the acids. Hydrogen sulfide production is evidenced by a black color either throughout the butt, or in a ring formation near the top of the butt. Gas production (aerogenic reaction) is detected as individual bubbles or by splitting or displacement of the agar.

COMPOSITION:

Ingredients	Gr/Liter
Peptone	20 gr
Yeast extract	3 gr
Peptone	20 gr
Sodium chloride	5 gr
Lactose	10 gr
Glucose	1 gr
Ferric citrate	0,3 gr
Sodium thiosulphate	0,3 gr
Phenol red	0,05 gr
Agar	12 gr

***Formula adjusted, standardized to suit performance parameters

pH: 7,4 ± 0,2

PRECAUTIONS:

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

Incubation at a temperature of 35±2°C and observed after 18-24 hours.

QUALITY CONTROL:

1. Sterility Control:

Incubation 2 d at 30-35°C and 3 d at 20-25°C: NO GROWTH

2. Physical/Chemical Control

pH: 7,4 ± 0,2

Appearance: Red

3.Microbiological Control: Incubation at a temperature of 35±2°C and observed after 18-24 hours.

Microorganism	Inoculum (CFU)	Results		Results	
		Growth	Slant	Butt	H2S
Escherichia coli ATCC 25922	10-100	Good	Acid	Acid	-
Proteus mirabilis ATCC 43071	10-100	Good	Neutral	Acid	+
Pseudomonas aeruginosa ATCC 27853	10-100	Good	Neutral	Neutral	-
Salmonella typhimurium ATCC 14028	10-100	Good	Neutral blackness	Acid	+

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2- 12°C. Use before expiry date on the label.Do not use beyond stated expiry date.

DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 01007

Content/Packaging: 50 Tubes/Box

REFERENCES:

1. Russell. 1911. J. Med. Res. 25:217.
2. Kligler. 1917. Am. J. Public Health. 7:1041.
3. Kligler. 1918. J. Exp. Med. 28:319.
4. Bailey and Lacy. 1927. J. Bacteriol. 13:183.
5. Ewing. 1986. Edwards and Ewing's identification of the Enterobacteriaceae, 4th ed. Elsevier Science Publishing Co., Inc. New York, N.Y.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature Limitation



Do not reuse



Contains sufficient for <n> tests



Look at user manual



Manufacturer



CE Mark