



Liquid Chromogenic Culture Medium



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Coliforms and E. coli liquid chromogenic medium

Performance Characteristics

1. It is included in the "Japan Food Hygiene Guide" (2004 edition) with strong authoritative influence.
2. There are two kinds of chromogenic substances, which can directly recognize coliforms and E. coli.
3. The test results can be obtained within 24 hours, but BGLB needs 48 hours.
4. No need for fermentation tube and constant temperature pool with low cost and easy operation.
5. No need to prepare medium and wash tubes (except XM powder medium).
6. No need for identification and supplementation experiments such as EMB culture.
7. E.coli O157 cannot be identified separately but qualitative testing only.

Name	Model	Application	Capacity	Packing	Validity Period
Liquid chromogenic culture medium	XM-30	For 1ml sample inspection	10ml/cup	128 cups/carton	1year
Liquid chromogenic culture medium	XM-31	For 10ml sample inspection	10ml/cup	128 cups/carton	
Liquid chromogenic culture medium	XM-32	For 5ml sample inspection	5ml/cup	128 cups/carton	
XM powder medium	XM0001	For preparing medium	8.5g/bag	20 bags/carton	3year
MT opener	OS-01	For MT container opening	/	1pc	/

Usage Method

1. Container surface sterilization: The aluminum foil surface should be disinfected with an alcohol lamp before use.
2. Opening: Open the aluminum foil with an MT opener (OS-01) or open directly with a sterile pipette.



3. Inject the sample diluents: use a pipette to inject the sample dilution into the cup.

XM-30: 1ml, XM-31: 10ml, XM-32: 5ml.

4. Cultivation: Culture time: 24 hours; Culture temperature: $36 \pm 1^\circ \text{C}$

5. Disposal: Dispose of them after sterilization

※XM powder medium usage: Dissolve 500ml of pure water per bag, inject 10ml into the test tube, autoclave, then inject 1ml sample, and incubate at $36 \pm 1^\circ \text{C}$ for 24 hours. The identification method is the same.

Coloring Principle

Coliforms positive

There is a special β -galactosidase only exist in the coliforms. It can be used as an indicator enzyme for coliform bacteria, which catalyzes the hydrolysis of the substrate X-GAL to form 5,5-dibromo -4,4-dichloro indigo, appearing light blue ~ purple blue.

E. coli positive

β -glucuronidase can be used as an indicator enzyme for Escherichia coli; because β -glucuronidase can be observed in Escherichia coli, Salmonella and Shigella in intestinal bacteria, and 95% of E. coli contains β -glucuronidase. It catalyzes the hydrolysis of MUG to form 4-methylumbelliferon, which exhibits fluorescence at 366 nm ultraviolet light and is visually discernible under indoor light intensity.

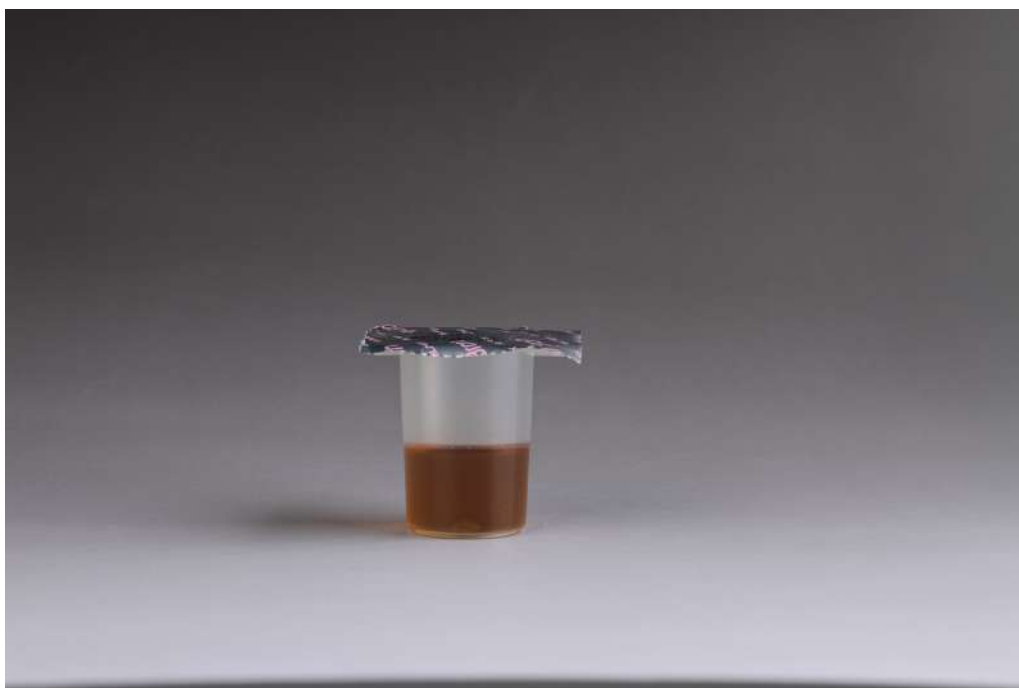
Operation and Coloring



Step 1



Step 2



Primary color – negative



Blue - coliforms positive



Fluorescence--E. coli positive